

Peer-Reviewed Journal Articles and Reports:**In Review**

- >>>> Gaal, R., J. L. Kinter III, P. A. Dirmeyer and B. Singh, 2024: Identifying the mechanism of interaction between soil moisture state and summertime MCS initiations in weakly-forced synoptic environments using convective-permitting simulations. *J. Geophys Res.*, (in review).
- >>>> Hsu, H., P. A. Dirmeyer and E. Seo, 2024: Exploring the mechanisms of the soil moisture-air temperature hypersensitive coupling regime. *Water Resour. Res.*, (in revision).
- >>>> Tak, S., E. Seo, P. A. Dirmeyer and M.-I. Lee, 2024: The role of soil moisture-temperature coupling for the 2018 Northern European heatwave in a subseasonal forecast. *Weather and Climate Extremes*, (in revision).
- >>>> Tokuda, D., H. Hsu, and P. A. Dirmeyer, 2024: Soil moisture-latent heat flux coupling in climate modeling: insights and implications from the offline land model. *J. Hydrometeor.*, (in review).
- >>>> Waterman, T., A. D. Bragg, P. A. Dirmeyer, M. Fowler, F. Hay-Chapman, and N. Chaney, 2024: A two-column model parameterization for subgrid surface heterogeneity driven circulations. *J. Adv. Mod. Earth Sys.*, (in revision).

2024

- J211.** Findell, K. L., Z. Yin, E. Seo, P. A. Dirmeyer, N. P. Arnold, N. Chaney, M. D. Fowler, M. Huang, D. M. Lawrence, P.-L. Ma, and J. A. Santanello Jr., 2024: Accurate assessment of land-atmosphere coupling in climate models requires high frequency data output, *Geosci. Mod. Dev.*, (in press).
- J210.** Fowler, M. D., R. B. Neale, T. Waterman, D. M. Lawrence, P. A. Dirmeyer, V. E. Larson, M. Huang, J. S. Simon, J. Truesdale, and N. W. Chaney, 2024: Assessing the atmospheric response to subgrid surface heterogeneity in single-column CESM2. *J. Adv. Mod. Earth Sys.*, (accepted).
- J209.** Richter, J. H., A. A. Glanville, T. King, S. Kumar, S. Yeager, N. A. Davis, Y. Duan, J. Edwards, J. M. Caron, P. A. Dirmeyer, G. Danabasoglu, and Keith Oleson 2024: Quantifying sources of subseasonal prediction skill. *npj Climate Atmos. Sci.*, (accepted).
- J208.** Seo, E., P. A. Dirmeyer, M. Barlage, H. Wei and M. Ek, 2024: Evaluation of land-atmosphere coupling processes and climatological bias in the UFS global coupled model. *J. Appl. Meteor. Clim.*, **25**, 161–175, doi: 10.1175/JHM-D-23-0097.1.
- J207.** Wang, G., R. Fu, Y. Zhuang, P. A. Dirmeyer, J. A. Santanello, G. Wang, K. Yang, and K. McColl, 2024: Influence of lower tropospheric moisture on local soil moisture-precipitation feedback over the U.S. Southern Great Plains. *Atmos. Chem. Physics*, (accepted).

2023

- J206.** Bayar, A. S., M. T. Yilmaz, İ. Yücel and P. A. Dirmeyer, 2023: CMIP6 Earth system models project acceleration of climate zone change during the 21st century. *Earth's Future*, **11**, e2022EF002972, doi: 10.1029/2022EF002972.
- J205.** Benson, D. O., and P. A. Dirmeyer, 2023: The soil moisture – surface flux relationship as a factor for extreme heat predictability in subseasonal to seasonal forecasts. *J. Climate*, **36**, 6375–6392, 10.1175/JCLI-D-22-0447.1.
- J204.** Hay-Chapman, F. M., and P. A. Dirmeyer, 2023: A novel method for diagnosing land-atmosphere coupling sensitivity in a single-column model. *J. Hydrometeor.*, **24**, 2207–2223, doi: 10.1175/JHM-D-22-0237.1.
- J203.** Hsu, H., and P. A. Dirmeyer, 2023: Soil moisture-evaporation coupling shifts into new gears under increasing CO₂. *Nature Comm.*, **14**, 1162, doi: 10.1038/s41467-023-36794-5.
- J202.** Hsu, H., and P. A. Dirmeyer, 2023: Uncertainty in projected critical soil moisture values in CMIP6 affects the interpretation of a more moisture-limited world. *Earth's Future*, **11**, e2023EF003511, doi: 10.1029/2023EF003511.
- J201.** Shin, C.-S., P. A. Dirmeyer and B. Huang, 2023: A joint approach using correlation and mutual information to study land and ocean drivers of drought over CONUS: Methodology. *J. Climate*, **36**, 2795–2814, doi: 10.1175/JCLI-D-22-0429.1.

J200. Stephens, G., J. Polcher, X. Zeng, P. van Oevelen, G. Poveda, M. Bosilovich, M.-H. Ahn, G. Balsamo, Q. Duan, G. Hegerl, C. Jakob, B. Lamptey, R. Leung, M. Piles Guillem, Z. Su, P. Dirmeyer, K. Findell, A. Verhoef, M. Ek, T. L'Ecuyer, R. Roca, A. Nazemi, F. Dominguez, D. Klocke, and S. Bony, 2023: The 30 years of GEWEX. *Bull. Amer. Meteor. Soc.*, **104**, E126-E157, doi: 10.1175/BAMS-D-22-0061.1.

J199. Yin, Z., K. L. Findell, P. A. Dirmeyer, E. Shevliakova, S. Malyshev, K. Ghannam, N. Raoult, and Z. Tan, 2023: Daytime-only-mean data can enhance understanding of land-atmosphere coupling. *Hydrol. Earth Sys. Sci.*, **27**, 861-872, doi: 10.5194/hess-27-861-2023.

2022

J198. Dirmeyer, P. A., R. S. S. Mantripragada, B. A. Gay and D. K. D. Klein, 2022: Evolution of land surface feedbacks on extreme heat - adapting existing coupling metrics to a changing climate. *Front. Environ. Sci.*, **15**, doi: 10.3389/fenvs.2022.949250.

J197. Abdolghafoorian, A. and P. A. Dirmeyer, 2022: Accounting for the effect of noise in satellite soil moisture data on estimates of land-atmosphere coupling using information theoretical metrics. *J. Hydrometeor.*, **23**, 1587-1605, doi: 10.1175/JHM-D-21-0232.1.

J196. Hsu, H. and P. A. Dirmeyer, 2022: Deconstructing the soil moisture-latent heat flux relationship by the span of coupling regimes and nonlinearity within the sensitive regime. *J. Hydrometeor.*, **23**, 1041-1057, doi: 10.1175/JHM-D-21-0224.1.

J195. Manthos, Z. H., K. V. Pegion, P. A. Dirmeyer and C. Stan, 2022: The Relationship Between Surface Weather Over North America and the Mid-Latitude Seasonal Oscillation. *Dyn. Atmos. Ocean*, **99**, 101314, doi: 10.1016/j.dynatmoce.2022.101314.

J194. Schumacher, D. L., J. Keune, P. A. Dirmeyer and D. G. Miralles, 2022: Drought self-propagation in drylands through moisture recycling. *Nature Geosci.*, **15**, 262-268, doi: 10.1038/s41561-022-00912-7.

J193. Seo, E., and P. A. Dirmeyer, 2022: Improving the ESA CCI daily soil moisture time series with physically-based land surface model datasets using a Fourier time-filtering method. *J. Hydrometeor.*, **23**, 473-489, doi: 10.1175/JHM-D-21-0120.1.

J192. Seo, E., and P. A. Dirmeyer, 2022: Understanding the diurnal cycle of land-atmosphere interactions from flux site observations. *Hydrol. Earth Sys. Sci.*, **26**, 5411-5429, doi: 10.5194/hess-26-5411-2022.

2021

J191. Dirmeyer, P. A., G. Balsamo, E. M. Blyth, R. Morrison, and H. M. Cooper, 2021: Land-atmosphere interactions may have exacerbated the drought and heatwave over northern Europe during summer 2018. *AGU Advances*, **2**, e2020AV000283, doi: 10.1029/2020AV000283.

J190. Abdolghafoorian, A., and P. A. Dirmeyer, 2021: Validating the land-atmosphere coupling behavior in weather and climate models using observationally-based global products. *J. Hydrometeor.*, **22**, 1507-1523, doi: 10.1175/JHM-D-20-0183.1.

J189. Benson, D. O., and P. A. Dirmeyer, 2021: Characterizing the relationship between temperature and soil moisture extremes and their role in the exacerbation of heatwaves over the contiguous United States. *J. Climate*, **34**, 2175-2187, doi: 10.1175/JCLI-D-20-0440.1.

J188. Hsu, H., and P. A. Dirmeyer, 2021: Nonlinearity and multivariate dependencies in land-atmosphere coupling. *Water Resour. Res.*, **57**, e2020WR028179, doi: 10.1029/2020WR028179.

J187. Simon, J. S., A. D. Bragg, P. A. Dirmeyer and N. W. Chaney, 2021: Semi-coupling of a field-scale resolving land-surface model and WRF-LES to investigate the influence of land-surface heterogeneity on cloud development. *J. Adv. Mod. Earth Sys.*, **13**, e2021MS002602, doi: 10.1029/2021MS002602.

2020

J186. Dirmeyer, P. A., and T. W. Ford, 2020: A technique for seamless forecast validation from weather to monthly time scales. *Mon. Wea. Rev.*, **148**, 3589-3603, doi: 10.1175/MWR-D-19-0076.1.

J185. Chen, L., and P. A. Dirmeyer, 2020: Reconciling the disagreement between observed and simulated temperature responses to deforestation. *Nature Comm.*, **11**, 202, doi: 10.1038/s41467-019-14017-0.

J184. Chen, L., and P. A. Dirmeyer, 2020: Distinct impacts of land use and land management on summer temperatures. *Front. Earth Sci.*, **8**:245, doi: 10.3389/feart.2020.00245.

- J183.** Dong, J., P. A. Dirmeyer, F. Lei., M. C. Anderson, T. R. H. Holmes, C. Hain and W. T. Crow, 2020: Soil evaporation stress determines soil moisture-evapotranspiration coupling strength in land surface modeling. *Geophys. Res. Lett.*, **47**, e2020GL090391, doi: 10.1029/2020GL090391.
- J182.** Mariotti, A., C. Baggett, E. Barnes, E. Becker, A. Butler, D. C. Collins, P. A. Dirmeyer, L. Ferranti, N. C. Johnson, J. Jones, B. P. Kirtman, A. L. Lang, A. Molod, M. Newman, A. W. Robertson, S. Schubert, D. E. Waliser, and J. Albers, 2020: Windows of opportunity for skillful forecasts subseasonal to seasonal and beyond. *Bull. Amer. Meteor. Soc.*, **101**, E608–E625, doi: 10.1175/BAMS-D-18-0326.1.
- J181.** Merryfield, W. J., J. Baehr, L. Batté, E. J. Becker, A. H. Butler, C. A. S. Coelho, G. Danabasoglu, P. A. Dirmeyer, F. J. Doblas-Reyes, D. I. V. Domeisen, L. Ferranti, T. Ilynia, A. Kumar, W. A. Müller, M. Rixen, A. W. Robertson, D. M. Smith, Y. Takaya, M. Tuma, F. Vitart, C. J. White, M. S. Alvarez, C. Ardilouze, H. Attard, C. Baggett, M. A. Balmaseda, A. F. Beraki, P. S. Bhattacharjee, R. Bilbao, F. M. de Andrade, M. J. DeFlorio, L. B. Díaz, M. Azhar Ehsan, G. Fragkoulidis, S. Grainger, B. W. Green, M. C. Hell, J. M. Infanti, K. Isensee, T. Kataoka, B. P. Kirtman, N. P. Klingaman, J.-Y. Lee, K. Mayer, R. McKay, J. V. Mecking, D. E. Miller, N. Neddermann, C. H. J. Ng, A. Ossó, K. Pankatz, K. Pegion, G. C. Recalde-Coronel, A. Reintges, C. Renkl, B. Solaraju-Murali, A. Spring, C. Stan, Y. Q. Sun, C. R. Tozer, N. Vigaud, S. Woolnough, and S. Yeager, 2020: Current and emerging developments in subseasonal to decadal prediction. *Bull. Amer. Meteor. Soc.*, **101**, E869–E896, doi: 10.1175/BAMS-D-19-0037.1.
- J180.** Shin, C.-S., B. Huang, P. A. Dirmeyer, S. Halder, and A. Kumar, 2020: Impact of land initial state uncertainty on subseasonal surface air temperature prediction in CFSv2 reforecasts. *J. Hydrometeorol.*, **21**, 2101–2121, doi: 10.1175/JHM-D-20-0024.1.
- J179.** Shin, C.-S., B. Huang, P. A. Dirmeyer, S. Halder, and A. Kumar, 2020: Sensitivity of US drought prediction skill to land initial states. *J. Hydrometeorol.*, **21**, 2793–2811, doi: 10.1175/JHM-D-20-0025.1.
- J178.** Wu, J., and P. A. Dirmeyer, 2020: Drought demise attribution over CONUS. *J. Geophys. Res.*, **125**, e2019JD031255, doi: 10.1029/2019JD031255.
- 2019**
- J177.** Chen, L. and P. A. Dirmeyer, 2019: The relative importance among anthropogenic forcings of land use/land cover change in affecting temperature extremes. *Climate Dyn.*, **52**, 2269–2285, doi: 10.1007/s00382-018-4250-z.
- J176.** Chen, L., and P. A. Dirmeyer, 2019: Global observed and modeled impacts of irrigation on surface temperature. *Intl. J. Climatol.*, **39**, 2587–2600, doi: 10.1002/joc.5973.
- J175.** Chen, L., and P. A. Dirmeyer, 2019: Differing responses of the diurnal cycle of land surface and air temperatures to deforestation. *J. Climate*, **32**, 7067–7079, doi: 10.1175/JCLI-D-19-0002.1.
- J174.** Mariotti, A., E. Barnes, E. K. M. Chang, A. Lang, P. Dirmeyer, K. Pegion, and D. Barrie, 2019: Bridging the weather-to-climate prediction gap: progress by the NOAA S2S Prediction Task Force. *Eos*, **100**, doi: 10.1029/2019EO115819.
- J173.** Shukla, R. P., B. Huang, P. A. Dirmeyer, J. L. Kinter, C.-S. Shin, and L. Marx, 2019: Climatological Influence of Eurasian winter surface conditions on the Asian and Indo-Pacific summer circulation in the CFSv2 seasonal reforecasts. *Int. J. Climatol.*, **39**, 3431–3453, doi: 10.1002/joc.6029.
- J172.** Shukla, R. P., B. Huang, P. A. Dirmeyer, J. L. Kinter, 2019: The influence of summer deep soil temperature on early winter snow conditions in Eurasia in the CFSv2 simulation. *J. Geophys. Res.*, **124**, 9062–9077, doi: 10.1029/2019JD030279.
- J171.** Wei, J., and P. A. Dirmeyer, 2019: Sensitivity of land precipitation to surface evapotranspiration: a nonlocal perspective based on water vapor transport. *Geophys. Res. Lett.*, **46**, 12,588–12,597, doi: 10.1029/2019GL085613.
- 2018**
- J170.** Dirmeyer, P. A., S. Halder, and R. Bombardi, 2018: On the harvest of predictability from land states in a global forecast model. *J. Geophys. Res.*, **123**, 13,111–13,127, doi: 10.1029/2018JD029103.
- J169.** Dirmeyer, P. A., L. Chen, J. Wu, C.-S. Shin, B. Huang, B. Cash, M. Bosilovich, S. Mahanama, R. D. Koster, J. A. Santanello Jr., M. B. Ek, G. Balsamo, E. Dutra and D. M. Lawrence, 2018: Verification of land-atmosphere coupling in forecast models, reanalyses and land surface models using flux site observations. *J. Hydrometeorol.*, **19**, 375–392, doi: 10.1175/JHM-D-17-0152.1.
- J168.** Dirmeyer, P. A., and H. E. Norton, 2018: Indications of surface and sub-surface hydrologic properties from SMAP soil moisture retrievals. *Hydrology*, **5**, 36, doi: 10.3390/hydrology5030036.

- J167.** Balsamo, G., A. Agusti-Panareda, C. Albergel, G. Arduini, A. Beljaars, J. Bidlot, E. M. Blyth, N. Bousserez, S. Bousetta, A. Brown, R. Buizza, C. Buontempo, F. Chevallier, M. Choulga, H. Cloke, M. F. Cronin, M. Dahoui, P. De Rosnay, P. A. Dirmeyer, M. Drusch, E. Dutra, M. B. Ek, P. Gentine, H. Hewett, S. P. E. Keeley, Y. Kerr, S. Kumar, C. Lupu, J.-F. Mahfouf, J. McNorton, S. Mecklenburg, K. Morgensen, J. Muñoz-Sabater, R. Orth, F. Rabier, R. Reichle, B. Ruston, F. Pappenberger, I. Sandu, S. I. Seneviratne, S. Tietsche, I. F. Trigo, R. Uijenoet, N. Wedi, R. I. Woolway, and X. Zeng, 2018: Satellite and in situ observations for advancing global earth surface modelling: A review. *Remote Sens.*, **10**, 2038, doi: 10.3390/rs10122038.
- J166.** Chen, L., P. A. Dirmeyer, Z. Guo and N. M. Schultz, 2018: Pairing FLUXNET sites to validate model representations of land use/land cover change. *Hydrol. Earth Sys. Sci.*, **22**, 111-125, doi: 10.5194/hess-22-111-2018.
- J165.** Ford, T. W., P. A. Dirmeyer and D. O. Benson, 2018: Evaluation of heat wave forecasts seamlessly across S2S time scales: skill attribution and the role of land-atmosphere interactions. *npj Climate Atmos. Sci.*, **1**:20, doi: 10.1038/s41612-018-0027-7.
- J164.** Halder, S., P. A. Dirmeyer, L. Marx and J. L. Kinter III, 2018: Impact of land surface initialization and land-atmosphere coupling on the prediction of the Indian summer monsoon with the CFSv2. *Front. Env. Sci.*, **5**:92, doi: 10.3389/fenvs.2017.00092.
- J163.** Hoyos, I. C., F. Dominguez, J. E. Cañón-Barriga, J. A. Martínez, R. Nieto, L. Gimeno, and P. A. Dirmeyer, 2017: Moisture origin and transport processes in Colombia, northern South America. *Climate Dyn.*, **50**, 971-990, doi: 10.1007/s00382-017-3653-6.
- J162.** Kumar, S. V., P. A. Dirmeyer, C. D. Peters-Lidard, and R. Bindlish, 2018: Information theoretic evaluation of satellite soil moisture retrievals. *Remote Sens. Env.*, **204**, 392-400, doi: 10.1016/j.rse.2017.10.016.
- J161.** Santanello, J. A., P. A. Dirmeyer, C. R. Ferguson, K. L. Findell, A. B. Tawfik, A. Berg, M. B. Ek, P. Gentine, B. Guillod, C. van Heerwaarden, J. Roundy, and V. Wulfmeyer, 2018: Land-atmosphere interactions: The LoCo perspective. *Bull. Amer. Meteor. Soc.*, **99**, 1253-1272, doi: 10.1175/BAMS-D-17-0001.1.
- J160.** Wei, J., P. A. Dirmeyer, Z.-L. Yang and H. Chen, 2018: Effect of land model ensemble versus coupled model ensemble on the simulation of precipitation climatology and variability. *Theor. Appl. Climatol.*, **134**, 793-800, doi: 10.1007/s00704-017-2310-7.
- 2017**
- J159.** Dirmeyer, P. A., and S. Halder, 2017: Application of the land-atmosphere coupling paradigm to the operational Coupled Forecast System (CFSv2). *J. Hydrometeorol.*, **18**, 85-108, doi: 10.1175/JHM-D-16-0064.1.
- J158.** Chen, L. and P. A. Dirmeyer, 2017: Impacts of land use/land cover change on afternoon precipitation over North America. *J. Climate*, **30**, 2121-2140, doi: 10.1175/JCLI-D-16-0589.1.
- J157.** Chen, L., P. A. Dirmeyer, A. Tawfik and D. M. Lawrence, 2017: Sensitivities of land cover-precipitation feedback to convective triggering. *J. Hydrometeorol.*, **18**, 2265-2284, doi: 10.1175/JHM-D-17-0011.1.
- J156.** Huang, B., C.-S. Shin, J. Shukla, L. Marx, M. Balmaseda, S. Halder, P. A. Dirmeyer, and J. L. Kinter III, 2017: Reforecasting the ENSO events in the past fifty-seven years (1958-2014). *J. Climate*, **30**, 7669-7693, doi: 10.1175/JCLI-D-16-0642.1.
- J155.** Koster, R. D., A. K. Betts, P. A. Dirmeyer, M. Bierkens, K. E. Bennett, S. J. Déry, J. Evans, R. Fu, F. Hernandez, L. R. Leung, X. Liang, M. Masood, H. Savenije, G. Wang, and X. Yuan, 2017: Hydroclimatic variability and predictability: A survey of recent research. *Hydrol. Earth Sys. Sci.*, **21**, 3777-3798, doi: 10.5194/hess-21-3777-2017.
- J154.** Marotzke, J., C. Jakob, S. Bony, P. A. Dirmeyer, P. O’Gorman, E. Hawkins, S. Perkins-Kirkpatrick, C. Le Quéré, S. Nowicki, K. Paulavets, S. I. Seneviratne, B. Stevens, and M. Tuma, 2017: Climate research must sharpen its view. *Nature Climate Change*, doi: 10.1038/nclimate3206.
- J153.** Tawfik, A. B., D. M. Lawrence, and P. A. Dirmeyer, 2017: Representing sub-grid convective initiation in the Community Earth System Model. *J. Adv. Mod. Earth Sys.*, **9**, doi: 10.1002/2016MS000866.
- J152.** Wada, Y., M. F. P. Bierkens, P. A. Dirmeyer, A. van Dijk, T. van Emmerik, J. S. Famiglietti, N. Hanasaki, M. Konar, J. Liu, H. M. Schmied, M. H.J. Van Huijgevoort, H. A. J. Van Lanen, T. Oki, Y. Pokhrel, A. de Roo, M. Sivapalan, T. J. Troy, C. J. Vörösmarty, N. Wanders, and H. Wheeler, 2017: Human-water interface in hydrological modeling: current status and future directions. *Hydrol. Earth Sys. Sci.*, **21**, 4169-4193, doi: 10.5194/hess-21-4169-2017.

2016

- J151.** Dirmeyer, P. A., and S. Halder, 2016: Sensitivity of surface fluxes and atmospheric boundary layer properties to initial soil moisture variations in CFSv2. *Wea. Fcst.*, **31**, 1973–1983, doi: 10.1175/WAF-D-16-0049.1.
- J150.** Dirmeyer, P. A., J. Wu, H. E. Norton, W. A. Dorigo, S. M. Quiring, T. W. Ford, J. A. Santanello Jr., M. G. Bosilovich, M. B. Ek, R. D. Koster, G. Balsamo, and D. M. Lawrence, 2016: Confronting weather and climate models with observational data from soil moisture networks over the United States. *J. Hydrometeor.*, **17**, 1049–1067, doi: 10.1175/JHM-D-15-0196.1.
- J149.** Dirmeyer, P. A., L. Yu, S. Amini, A. D. Crowell, A. Elders, and J. Wu, 2016: Projections of the shifting envelope of water cycle variability. *Climatic Change*, **136**, 587–600, doi: 10.1007/s10584-016-1634-0.
- J148.** Badger, A. M., and P. A. Dirmeyer, 2016: Local and remote non-linearities due to spatial distribution of Amazon deforestation. *J. Geophys. Res.*, **121**, 9033–9047, doi: 10.1002/2015JD024013.
- J147.** Badger, A. M., and P. A. Dirmeyer, 2016: Remote tropical and sub-tropical responses to Amazon deforestation. *Climate Dyn.* **46**, 3057–3066, doi: 10.1007/s00382-015-2752-5.
- J146.** Bombardi, R. J., A. B. Tawfik, J. V. Manganello, L. Marx, C.-S. Shin, E. K. Schneider, P. A. Dirmeyer, and J. L. Kinter III, 2016: The Heated Condensation Framework as a convective trigger in the NCEP Climate Forecast System version 2. *J. Adv. Mod. Earth Sys.*, **8**, doi: 10.1002/2016MS000668.
- J145.** Chen, L. and P. A. Dirmeyer, 2016: Adapting observationally-based metrics of biogeophysical feedback from land cover change to climate modeling. *Env. Res. Lett.*, **11**, 034002, doi: 10.1088/1748-9326/11/3/034002.
- J144.** Halder, S., and P. A. Dirmeyer, 2016: Relation of Eurasian snow cover and Indian summer monsoon rainfall: Importance of the delayed hydrological effect. *J. Climate*, **30**, 1273–1289, doi: 10.1175/JCLI-D-16-0033.1.
- J143.** Halder, S., S. K. Saha, P. A. Dirmeyer, T. N. Chase, and B. N. Goswami, 2016: Investigating the impact of land-use land-cover change on Indian summer monsoon daily rainfall and temperature during 1951–2005 using a regional climate model. *Hydrol. Earth Sys. Sci.*, **20**, 1765–1784, doi: 10.5194/hess-20-1765-2016.
- J142.** Haughton, N., G. Abramowitz, A. J. Pitman, D. Or, M. J. Best, H. R. Johnson, G. Balsamo, A. Boone, M. Cuntz, B. Decharme, P. A. Dirmeyer, J. Dong, M. Ek, Z. Guo, V. Haverd, B. J. van den Hurk, G. S. Nearing, B. Pak, C. Peters-Lidard, J. A. Santanello Jr., L. Stevens and N. Vuichard, 2016: The plumbing of land surface models: why are models performing so poorly? *J. Hydrometeor.*, **17**, 1705–1723, doi: 10.1175/JHM-D-15-0171.1.
- J141.** Kumar, S., F. Zwiers, P. A. Dirmeyer, D. M. Lawrence, J. Sheffield, R. Shrestha, and A. Werner, 2016: Terrestrial contribution to the heterogeneity in hydrological changes under global warming. *Water Resour. Res.*, **52**, 3127–3142, doi: 10.1002/2016WR018607.
- J140.** Wei, J., Q. Jin, Z.-L. Yang and P. A. Dirmeyer, 2016: Role of ocean evaporation in California droughts and floods. *Geophys. Res. Lett.*, **43**, 6554–6562, doi: 10.1002/2016GL069386.
- J139.** Xue, Y, F. De Sales, W. K-M Lau, A. Boone, K.-M. Kim, C. R. Mechoso, G. Wang, F. Kucharski, K. Schiro, M. Hosaka, S. Li, L. M. Druyan, I. Seidou Sanda, W. Thiaw, N. Zeng, R. E. Comer, Y.-K. Lim, S. Mahanama, G. Song, Y. Gu, S. M Hagos, M. Chin, S. Schubert, P. Dirmeyer, L. R. Leung, E. Kalnay, A. Kitoh, C.-H. Lu, N. M. Mahowald, Z. Zhang, 2016: West African monsoon decadal variability and drought and surface-related forcings: Second West African Monsoon Modeling and Evaluation Project Experiment (WAMME II). *Climate Dyn.*, **47**, 3517–3545, doi: 10.1007/s00382-016-3224-2.
- 2015**
- J138.** Badger, A. M., and P. A. Dirmeyer, 2015: Climate response to Amazon forest replacement by heterogeneous crop cover. *Hydrol. Earth Sys. Sci.*, **19**, 4547–4557, doi: 10.5194/hess-19-4547-2015.
- J137.** Best, M. J., G. Abramowitz, H. R. Johnson, A. J. Pitman, G. Balsamo, A. Boone, M. Cuntz, B. Decharme, P. A. Dirmeyer, J. Dong, M. Ek, Z. Guo, V. Haverd, B. J. J. van den Hurk, G. S. Nearing, B. Pak, C. Peters-Lidard, J. A. Santanello Jr., L. Stevens, and N. Vuichard, 2015: The plumbing of land surface models: benchmarking model performance. *J. Hydrometeor.*, **16**, 1425–1442, doi: 10.1175/JHM-D-14-0158.1.
- J136.** Bombardi, R. J., E. K. Schneider, L. Marx, S. Halder, B. Singh, A. B. Tawfik, P. A. Dirmeyer and J. L. Kinter III, 2015: Improvements in the representation of the Indian summer monsoon in the NCEP Climate Forecast System version 2. *Climate Dyn.*, **45**, 2485–2498, doi: 10.1007/s00382-015-2484-6.
- J135.** Halder, S., P. A. Dirmeyer, S. K. Saha, 2015: Uncertainty in the mean and variability of Indian summer monsoon due to land-atmosphere feedback in RegCM4. *J. Geophys. Res.*, **120**, 9437–9458, doi: 10.1002/2015JD023101.

- J134.** Kumar, S., R. P. Allan, F. Zwiers, D. M. Lawrence, and P. A. Dirmeyer, 2015: Revisiting trends in wetness and dryness in the presence of internal climate variability and water limitations over land. *Geophys. Res. Lett.*, **42**, 10,867–10,875, doi: 10.1002/2015GL066858.
- J133.** Santanello, J. A., J. Roundy and P. A. Dirmeyer, 2015: Quantifying the land-atmosphere coupling behavior in modern reanalysis products over the U.S. Southern Great Plains. *J. Climate*, **28**, 5813–5829, doi: 10.1175/JCLI-D-14-00680.1.
- J132.** Tawfik, A. B., P. A. Dirmeyer, and J. A. Santanello, 2015: The heated condensation framework. Part I: Description and Southern Great Plains case study. *J. Hydrometeor.*, **16**, 1929–1945, doi: 10.1175/JHM-D-14-0117.1.
- J131.** Tawfik, A. B., P. A. Dirmeyer, and J. A. Santanello, 2015: The heated condensation framework. Part II: Climatological behavior of convective initiation and land-atmosphere coupling over the continental United States. *J. Hydrometeor.*, **16**, 1946–1961, doi: 10.1175/JHM-D-14-0118.1.
- 2014**
- J130.** Dirmeyer, P. A., J. Wei, M. G. Bosilovich, and D. M. Mocko, 2014: Comparing evaporative sources of terrestrial precipitation and their extremes in MERRA using relative entropy. *J. Hydrometeor.*, **15**, 102–116, doi: 10.1175/JHM-D-13-053.1.
- J129.** Dirmeyer, P. A., Z. Wang, M. J. Mbulu and H. E. Norton, 2014: Intensified land surface control on boundary layer growth in a changing climate. *Geophys. Res. Lett.*, **41**, 1290–1294, doi: 10.1002/2013GL058826.
- J128.** Dirmeyer, P. A., G. Fang, Z. Wang, P. Yadav and A. Milton, 2014: Climate change and sectors of the surface water cycle in CMIP5 projections. *Hydrol. Earth Sys. Sci.*, **11**, 8537–8569, doi: 10.5194/hess-18-5317-2014.
- J127.** DelSole, T., X. Yan, P. A. Dirmeyer, M. Fennessy, and E. Altshuler, 2014: Seasonal predictability in a changing climate. *J. Climate*, **27**, 300–311, doi: 10.1175/JCLI-D-13-00026.1.
- J126.** Kumar, S., P. A. Dirmeyer and J. Kinter III, 2014: Usefulness of ensemble forecasts from NCEP Climate Forecast System in sub-seasonal to intra-annual forecasting. *Geophys. Res. Lett.*, **41**, 3586–3593, doi: 10.1002/2014GL059586.
- J125.** Mahmood, R., R. A. Pielke Sr., K. G. Hubbard, D. Niyogi, P. A. Dirmeyer, C. McAlpine, A. M. Carleton, R. Hale, S. Gameda, A. Beltrán-Przekurat, B. Baker, R. McNider, D. R. Legates, M. Shepherd, J. Du, P. Blanken, O. Frauenfeld, U. S. Nair, and S. Fall 2014: Land cover changes and their biogeophysical effects on climate. *Int. J. Climatol.*, **34**, 929–953, doi: 10.1002/joc.3736.
- J124.** Sutanto, S. J., B. van den Hurk, G. Hoffman, J. Wenninger, P. A. Dirmeyer, S. I. Seneviratne, T. Röckmann, K. E. Trenberth, and E. M. Blyth, 2014: A perspective on different approaches to determine the contribution of transpiration to the surface moisture fluxes. *Hydrol. Earth Sys. Sci.*, **18**, 2815–2827, doi: 10.5194/hess-18-2815-2014.
- J123.** Tawfik, A. B., and P. A. Dirmeyer, 2014: A process-based framework for quantifying the atmospheric preconditioning of surface triggered convection. *Geophys. Res. Lett.*, **41**, 173–178, doi: 10.1002/2013GL057984.
- 2013**
- J122.** Dirmeyer, P. A., 2013: Characteristics of the water cycle and land-atmosphere interactions from a comprehensive reforecast and reanalysis data set: CFSv2. *Climate Dyn.*, **41**, 1083–1097, doi: 10.1007/s00382-013-1866-x.
- J121.** Dirmeyer, P. A., Y. Jin, B. Singh, and X. Yan, 2013: Trends in land-atmosphere interactions from CMIP5 simulations. *J. Hydrometeor.*, **14**, 829–849, doi: 10.1175/JHM-D-12-0107.1.
- J120.** Dirmeyer, P. A., Y. Jin, B. Singh, and X. Yan, 2013: Evolving land-atmosphere interactions over North America from CMIP5 simulations. *J. Climate*, **26**, 7313–7327, doi: 10.1175/JCLI-D-12-00454.1.
- J119.** Dirmeyer, P. A., S. Kumar, M. J. Fennessy, E. L. Altshuler, T. DelSole, Z. Guo, B. Cash and D. Straus, 2013: Model estimates of land-driven predictability in a changing climate from CCSM4. *J. Climate*, **26**, 8495–8512, doi: 10.1175/JCLI-D-13-00029.1.
- J118.** Arsenault, K. R., P. R. Houser, G. De Lannoy, and P. A. Dirmeyer, 2013: Impacts of snow cover fraction data assimilation method complexity on modeled energy and moisture budgets. *J. Geophys. Res.*, **118**, 7489–7504, doi: 10.1002/jgrd.50542.
- J117.** Guo, Z., and P. A. Dirmeyer, 2013: Interannual variability of land-atmosphere coupling strength. *J. Hydrometeor.*, **14**, 1636–1646, doi: 10.1175/JHM-D-12-0171.1.

- J116.** Kinter III, J. L., B. Cash, D. Achuthavarier, J. Adams, E. Altshuler, P. Dirmeyer, B. Huang, L. Marx, J. Manganello, C. Stan, T. Wakefield, E. Jin, T. Palmer, M. Hamrud, T. Jung, M. Miller, P. Towers, N. Wedi, M. Satoh, H. Tomita, C. Kodama, T. Nasuno, K. Oouchi, Y. Yamada, H. Taniguchi, P. Andrews, T. Baer, C. Halloy, D. John, B. Loftis, R. Mohr and K. Wong, 2013: Revolutionizing climate modeling – Project Athena: A multi-institutional, international collaboration. *Bull. Amer. Meteor. Soc.*, **94**, 231–245, doi: 10.1175/BAMS-D-11-00043.1.
- J115.** Kumar, S., D. M. Lawrence, P. A. Dirmeyer and J. Sheffield, 2013: Less reliable water availability in the 21st century climate projections. *Earth's Future*, **1**, doi: 10.1002/2013EF000159.
- J114.** Kumar, S., J. Kinter III, P. A. Dirmeyer, Z. Pan, and J. M. Adams, 2013: Multi-decadal climate variability and the “warming hole” in North America – results from CMIP5 20th and 21st century climate simulations, *J. Climate*, **26**, 3511–3527, doi: 10.1175/JCLI-D-12-00535.1.
- J113.** Kumar, S., P. A. Dirmeyer, V. Merwade, T. DelSole, J. M. Adams, and D. Niyogi, 2013: Land use/cover change impacts in CMIP5 climate simulations: A new methodology and 21st century challenges. *J. Geophys. Res.*, **118**, 6337–6353, doi: 10.1002/jgrd.50463.
- J112.** Mueller, B., M. Hirschi, C. Jimenez, P. Ciais, P. A. Dirmeyer, A. J. Dolman, J. B. Fisher, Z. Guo, M. Jung, F. Ludwig, F. Maignan, D. Miralles, M. F. McCabe, M. Reichstein, J. Sheffield, K. Wang, E. F. Wood, Y. Zhang, and S.I. Seneviratne, 2013: Benchmark products for land evapotranspiration: LandFlux-EVAL multi-data set synthesis. *Hydrol. Earth Sys. Sci.*, **17**, 3707–3720, doi: 10.5194/hess-17-3707-2013.
- J111.** Wei, J., P. A. Dirmeyer, D. Wisser, M. J. Bosilovich, and D. M. Mocko, 2013: Where does the irrigation water go? An estimate of the contribution of irrigation to precipitation using MERRA. *J. Hydrometeor.*, **14**, 275–289, doi: 10.1175/JHM-D-12-079.1.
- J110.** Xu, L., and P. Dirmeyer, 2013: Snow-atmosphere coupling strength. Part I: Effect of model biases. *J. Hydrometeor.*, **14**, 389–403, doi: 10.1175/JHM-D-11-0102.1.
- J109.** Xu, L., and P. Dirmeyer, 2013 Snow-atmosphere coupling strength. Part II: Albedo effect versus hydrological effect. *J. Hydrometeor.*, **14**, 404–418, doi: 10.1175/JHM-D-11-0103.1.
- 2012**
- J108.** Dirmeyer, P. A., B. A. Cash, J. L. Kinter III, T. Jung, L. Marx, M. Satoh, C. Stan, H. Tomita, P. Towers, N. Wedi, D. Achuthavarier, J. M. Adams, E. L. Altshuler, B. Huang, E. K. Jin, and J. Manganello, 2012: Simulating the hydrologic diurnal cycle in global climate models: Resolution versus parameterization. *Climate Dyn.*, **39**, 399–418, doi: 10.1007/s00382-011-1127-9.
- J107.** Dirmeyer, P. A., B. A. Cash, J. L. Kinter III, T. Jung, L. Marx, C. Stan, P. Towers, N. Wedi, J. M. Adams, E. L. Altshuler, B. Huang, E. K. Jin, and J. Manganello, 2012: Evidence for enhanced land-atmosphere feedback in a warming climate. *J. Hydrometeor.*, **13**, 981–995, doi: 10.1175/JHM-D-11-0104.1.
- J106.** Bagley, J. E., A. R. Desai, P. A. Dirmeyer, and J. A. Foley, 2012: Effects of land cover change on precipitation and crop yield in the world’s breadbaskets. *Env. Res. Lett.*, **7**, 014009, doi: 10.1088/1748-9326/7/1/014009.
- J105.** Guo, Z., P. A. Dirmeyer, and T. DelSole, and R. D. Koster, 2012: Rebound in atmospheric predictability and the role of the land surface. *J. Climate*, **25**, 4744–4749, doi: 10.1175/JCLI-D-11-00651.1.
- J104.** Wei, J., P. A. Dirmeyer, M. J. Bosilovich, and R. Wu. 2012: Water vapor sources for Yangtze River Valley rainfall: Climatology, variability, and implications for rainfall forecasting, *J. Geophys. Res.*, **117**, D05126, doi: 10.1029/2011JD016902.
- J103.** Wei, J., and P. A. Dirmeyer, 2012: Dissecting soil moisture-precipitation coupling. *Geophys. Res. Lett.*, **39**, L19711, doi: 10.1029/2012GL053038.
- 2011**
- J102.** Dirmeyer, P. A., 2011: A history of the Global Soil Wetness Project (GSWP). *J. Hydrometeor.*, **12**, 729–749, doi: 10.1175/JHM-D-10-05010.1.
- J101.** Dirmeyer, P. A., 2011: The terrestrial segment of soil moisture-climate coupling. *Geophys. Res. Lett.*, **38**, L16702, doi: 10.1029/2011GL048268.
- J100.** Dirmeyer, P. A., T. DelSole and M. Zhao, 2011: Limits to the impact of data assimilation on simulation of the water cycle. *J. Hydrometeor.*, **12**, 650–662, doi: 10.1175/2011JHM1348.1.

- J99.** De Lannoy, G. J. M., J. Ufford, A. K. Sahoo, P. R. Houser, and P. A. Dirmeyer, 2011: Observed and simulated water and energy budget components at SCAN sites in the lower Mississippi Basin. *Hydrol. Proc.*, **25**, 634-649, doi: 10.1002/hyp.7855.
- J98.** Guo, Z., P. A. Dirmeyer, and T. DelSole, 2011: Land surface impacts on subseasonal and seasonal predictability. *Geophys. Res. Lett.*, **38**, L24812, doi: 10.1029/2011GL049945.
- J97.** Jiménez, C., C. Prigent, B. Mueller, S. I. Seneviratne, M. F. McCabe, E. F. Wood, W. B. Rossow, G. Balsamo, A. K. Betts, P. A. Dirmeyer, J. B. Fisher, M. Jung, M. Kanamitsu, R. H. Reichle, M. Reichstein, M. Rodell, J. Sheffield, K. Tu, and K. Wang, 2011: Global inter-comparison of 12 land surface heat flux estimates. *J. Geophys. Res.*, **116**, D02102, doi: 10.1029/2010JD014545.
- J96.** Koster, R. D., S. P. P. Mahanama, T. J. Yamada, G. Balsamo, A. A. Berg, M. Boisserie, P. A. Dirmeyer, F. J. Doblas-Reyes, G. Drewitt, C. T. Gordon, Z. Guo, J.-H. Jeong, W.-S. Lee, Z. Li, L. Luo, S. Malyshev, W. J. Merryfield, S. I. Seneviratne, T. Stanelle, B. J. J. M. van den Hurk, F. Vitart, and E. F. Wood, 2011: The second phase of the Global Land-Atmosphere Coupling Experiment: Soil moisture contributions to subseasonal forecast skill. *J. Hydrometeorol.*, **12**, 805–822, doi: 10.1175/2011JHM1365.1.
- J95.** Mueller, B., S. I. Seneviratne, C. Jimenez, T. Corti, M. Hirschi, G. Balsamo, P. Ciais, P. Dirmeyer, J. B. Fisher, Z. Guo, M. Jung, F. Maignan, M. F. McCabe, R. Reichle, M. Reichstein, M. Rodell, J. Sheffield, A. J. Teuling, K. Wang, E. F. Wood, and Y. Zhang, 2011: Evaluation of global observations-based evapotranspiration datasets and IPCC AR4 simulations. *Geophys. Res. Lett.*, **38**, L06402, doi: 10.1029/2010GL046230.
- J94.** van den Hurk, B., M. Best, P. A. Dirmeyer, A. J. Pitman, J. Polcher and J. Santanello, 2011: Over a decade of GLASS has accelerated land surface model development. *Bull. Amer. Meteor. Soc.*, **92**, 1593-1600, doi: 10.1175/BAMS-D-11-00007.1.
- J93.** Xu, L., and P. Dirmeyer, 2011: Snow-atmosphere coupling strength in a global atmospheric model. *Geophys. Res. Lett.*, **38**, L13401, doi: 10.1029/2011GL048049.
- J92.** Zhang, L., P. A. Dirmeyer, J. Wei, Z. Guo, and C.-H. Lu, 2011: Land-atmosphere coupling strength in the Global Forecast System. *J. Hydrometeorol.*, **12**, 147-156, doi: 10.1175/2010JHM1319.1.
- 2010**
- J91.** Dirmeyer, P. A., and J. L. Kinter III, 2010: Floods over the US Midwest: A regional water cycle perspective. *J. Hydrometeorol.*, **11**, 1172-1181, doi: 10.1175/2010JHM1196.1.
- J90.** Dirmeyer, P. A., D. Niyogi, N. deNoblet-Ducoudré, R. E. Dickinson, and P. K. Snyder, 2010: Impacts of land use change on climate. *Intl. J. Climatol.*, **30**, 1905-1907, doi: 10.1002/joc.2157.
- J89.** Koster, R., S. Mahanama, T. J. Yamada, G. Balsamo, M. Boisserie, P. Dirmeyer, F. Doblas-Reyes, C. T. Gordon, Z. Guo, J.-H. Jeong, D. Lawrence, Z. Li, L. Luo, S. Malyshev, W. Merryfield, S. I. Seneviratne, T. Stanelle, B. van den Hurk, F. Vitart, and E. F. Wood, 2010: The contribution of land surface initialization to subseasonal forecast skill: first results from the GLACE-2 project. *Geophys. Res. Lett.*, **37**, L02402, doi: 10.1029/2009GL041677.
- J88.** Materia, S., P. A. Dirmeyer, Z. Guo, A. Alessandri and A. Navarra, 2010: The sensitivity of simulated river discharge to land surface representation and meteorological forcings. *J. Hydrometeorol.*, **11**, 334-351, doi: 10.1175/2009JHM1162.1.
- J87.** Wei, J., P. A. Dirmeyer, and J. Zhang, 2010: Land caused uncertainties in climate change simulations. *Quart. J. Roy. Meteor. Soc.*, **136**, 819-824, doi: 10.1002/qj.598.
- J86.** Wei, J., P. A. Dirmeyer, Z. Guo, L. Zhang, and V. Misra, 2010: How much do different land models matter for climate simulation? Part I: Climatology and variability. *J. Climate*, **23**, 3120-3134, doi: 10.1175/2010JCLI3177.1.
- J85.** Wei, J., P. A. Dirmeyer, and Z. Guo, 2010: How much do different land models matter for climate simulation? Part II: A temporal decomposition of land-atmosphere coupling strength. *J. Climate*, **23**, 3135-3145, doi: 10.1175/2010JCLI3178.1.
- J84.** Wei, J., and P. A. Dirmeyer, 2010: Toward understanding the large-scale land-atmosphere coupling in the models – the roles of different processes. *J. Geophys. Res.*, **37**, L19707, doi: 10.1029/2010GL044769.
- J83.** Xue, Y., F. De Sales, W. Lau, A. Boone, J. Feng, P. Dirmeyer, Z. Guo, K.-M. Kim, A. Kitoh, V. Kumar, I. Poccarr-Leclercq, N. Mahowald, W. Moufouma-Okia, P. Pegion, D. P. Rowell, J. Schemm, S. D. Schubert, A. Sealy, W. M. Thiaw, A. Vintzileos, S. F. Williams, and M.-L. C. Wu, 2010: Intercomparison and analyses of the climatology of

the West African Monsoon in the West African Monsoon Modeling and Evaluation project (WAMME) first model intercomparison experiment. *Climate Dyn.*, **35**, 3-27, doi: 10.1007/s00382-010-0778-2.

- J82.** Zhou, L., R. E. Dickinson, P. Dirmeyer, A. Dai, and S.-K. Min, 2010: Detection and attribution of anthropogenic forcing to diurnal temperature range changes from 1950 to 1999: comparing multi-model simulations with observations. *Climate Dyn.*, **35**, 1289-1307, doi: 10.1007/s00382-009-0644-2.

2009

- J81.** Dirmeyer, P. A., K. L. Brubaker, and T. DelSole, 2009: Import and export of atmospheric water vapor between nations. *J. Hydrol.*, **365**, 11-22, doi: 10.1016/j.jhydrol.2008.11.016.
- J80.** Dirmeyer, P. A., C. A. Schlosser, and K. L. Brubaker, 2009: Precipitation, recycling and land memory: An integrated analysis. *J. Hydrometeor.*, **10**, 278–288, doi: 10.1175/2008JHM1016.1.
- J79.** Dirmeyer, P. A., and J. L. Kinter III, 2009: The Maya Express - Late spring floods in the US Midwest. *Eos – Transactions of the American Geophysical Union*, **90**, 101-102, 10.1029/2009EO120001.
- J78.** DelSole, T., M. Zhao, and P. A. Dirmeyer, 2009: A new method for exploring coupled land-atmosphere dynamics. *J. Hydrometeor.*, **10**, 1040-1050, doi: 10.1175/2009JHM1071.1.
- J77.** Koster, R. D., Z. Guo, P. A. Dirmeyer, R. Yang, K. Mitchell, and M. J. Puma, 2009: On the nature of soil moisture in land surface models. *J. Climate*, **22**, 4322–4335, doi: 10.1175/2009JCLI2832.1.
- J76.** Misra, V., and P. A. Dirmeyer, 2009: Air, sea and land interactions of the continental US hydroclimate. *J. Hydrometeor.*, **10**, 353-373, doi: 10.1175/2008JHM1003.1.
- J75.** Zhou, L., R. E. Dickinson, A. Dai, and P. Dirmeyer, 2009: Spatiotemporal patterns of changes in maximum and minimum temperatures in multi-model simulations. *Geophys. Res. Lett.*, **36**, L02702, doi: 10.1029/2008GL036141.

2008

- J74.** Dirmeyer, P. A., 2008: Book Review – Climate Change: Biological and Human Aspects by J. Cowie. *Bull. Amer. Meteor. Soc.*, **89**, 1175-1178.
- J73.** DelSole, T., M. Zhao, P. A. Dirmeyer and B. P. Kirtman, 2008: Empirical correction of a coupled land-atmosphere model. *Mon. Wea. Rev.*, **136**, 4063–4076, doi: 10.1175/2008MWR2344.1.
- J72.** Gao, X., P. A. Dirmeyer, Z. Guo, and M. Zhao, 2008: Sensitivity of land surface simulations to the treatment of vegetation properties and implications for seasonal climate prediction. *J. Hydrometeor.*, **9**, 348-366, doi: 10.1175/2007JHM931.1.
- J71.** Sahoo, A. K., P. A. Dirmeyer, P. R. Houser and M. Kafatos, 2008: A study of land surface processes using land surface models over the Little River Experimental Watershed, Georgia. *J. Geophys. Res.*, **113**, D20121, doi: 10.1029/2007JD009671.
- J70.** Sahoo, A. K., P. R. Houser, C. Ferguson, E. F. Wood, P. A. Dirmeyer and M. Kafatos, 2008: Evaluation of AMSR-E retrieval methods using the in-situ data over the Little River Experimental Watershed, Georgia. *Remote Sens. Env.*, **112**, 3142-3152, doi: 10.1016/j.rse.2008.03.007.
- J69.** Wei, J., P. A. Dirmeyer, and Z. Guo, 2008: Sensitivities of soil wetness simulation to uncertainties in precipitation and radiation, *Geophys. Res. Lett.* **35**, L15703, doi: 10.1029/2008GL034494.
- J68.** Zhou, L., R. Dickinson, P. Dirmeyer, H. Chen, Y. Dai, and Y. Tian, 2008: Asymmetric response of maximum and minimum temperatures to soil emissivity change over the northern African Sahel in a GCM. *Geophys. Res. Lett.*, **35**, L05402, doi: 10.1029/2007GL032953.

2007

- J67.** Dirmeyer, P. A., and K. L. Brubaker, 2007: Characterization of the global hydrologic cycle from a quasi-isentropic back-trajectory analysis of atmospheric water vapor. *J. Hydrometeor.* **8**, 20-37, doi: 10.1175/JHM557.1.
- J66.** Guo, Z., P. A. Dirmeyer, X. Gao, and M. Zhao, 2007: Improving the quality of simulated soil moisture with a multi-model ensemble approach. *Quart. J. Roy. Meteor. Soc.*, **133**, 731-747, doi: 10.1002/qj.48.
- J65.** Misra, V., L. Marx, J. L. Kinter III, B. P. Kirtman, Z. Guo, D. Min, M. Fennessy, P. A. Dirmeyer, R. Kallummal, and D. M. Straus, 2007: Validating and understanding the ENSO simulation in two coupled climate models. *Tellus*, **39A**, 292-308, doi: 10.1111/j.1600-0870.2007.00231.x.
- J64.** Peters-Lidard, C. D., P. R. Houser, Y. Tian, S. V. Kumar, J. Geiger, S. Olden, L. Lighty, B. Doty, P. Dirmeyer, J. Adams, K. Mitchell, E.F. Wood, J. Sheffield, 2007: High performance earth system modeling with NASA/GSFC's Land Information System. *Innovations in Systems and Software Engineering*, **3**, doi: 10.1007/s11334-007-0028-x.

2006

- J63.** Dirmeyer, P. A., 2006: The hydrologic feedback pathway for land-climate coupling. *J. Hydrometeorol.*, **7**, 857-867, doi: 10.1175/JHM526.1.
- J62.** Dirmeyer, P. A., and K. L. Brubaker, 2006: Evidence for trends in the Northern Hemisphere water cycle. *Geophys. Res. Lett.*, **33**, L14712, doi: 10.1029/2006GL026359.
- J61.** Dirmeyer, P. A., X. Gao, M. Zhao, Z. Guo, T. Oki and N. Hanasaki, 2006: The Second Global Soil Wetness Project (GSWP-2): Multi-model analysis and implications for our perception of the land surface. *Bull. Amer. Meteor. Soc.*, **87**, 1381-1397, doi: 10.1175/BAMS-87-10-1381.
- J60.** Dirmeyer, P. A., R. D. Koster, and Z. Guo, 2006: Do global models properly represent the feedback between land and atmosphere? *J. Hydrometeorol.*, **7**, 1177-1198, doi: 10.1175/JHM532.1.
- J59.** Betts, A. K., M. Zhao, P. A. Dirmeyer and A. C. M. Beljaars, 2006: Comparison of ERA40 and NCEP/DOE near-surface datasets with other ISLSCP-II datasets. *J. Geophys. Res.*, **111**, D22S04, doi: 10.1029/2006JD007174.
- J58.** Gao, X., and P. A. Dirmeyer, 2006: Multi-model analysis, validation, and transferability study for global soil wetness products. *J. Hydrometeorol.*, **7**, 1218-1236, doi: 10.1175/JHM551.1.
- J57.** Guo, Z., P. A. Dirmeyer, R. D. Koster, G. Bonan, E. Chan, P. Cox, H. Davies, T. Gordon, S. Kanae, E. Kowalczyk, D. Lawrence, P. Liu, S. Lu, S. Malyshev, B. McAvaney, K. Mitchell, T. Oki, K. Oleson, A. Pitman, Y. Sud, C. Taylor, D. Verseghy, R. Vasic, Y. Xue, and T. Yamada, 2006: GLACE: The Global Land-Atmosphere Coupling Experiment. 2. Analysis. *J. Hydrometeorol.*, **7**, 611-625, doi: 10.1175/JHM511.1.
- J56.** Guo, Z., and P. A. Dirmeyer, 2006: Evaluation of GSWP-2 soil moisture simulations, Part I: Inter-model comparison. *J. Geophys. Res.*, **111**, D22S02, doi: 10.1029/2006JD007233.
- J55.** Guo, Z., P. A. Dirmeyer, Z.-Z. Hu, X. Gao, and M. Zhao, 2006: Evaluation of GSWP-2 soil moisture simulations, Part II: Sensitivity to external meteorological forcing. *J. Geophys. Res.*, **111**, D22S03, doi: 10.1029/2006JD007845.
- J54.** Hall, F. G., E. Brown de Colstoun, G. J. Collatz, D. Landis, P. Dirmeyer, A. Betts, G. Huffman, L. Bounoua and B. Meeson, 2006: ISLSCP Initiative II global data sets: Surface boundary conditions and atmospheric forcings for land-atmosphere studies. *J. Geophys. Res.*, **111**, doi: 10.1029/2006JD007366.
- J53.** Koster, R. D., Guo, Z., P. A. Dirmeyer, G. Bonan, E. Chan, P. Cox, H. Davies, T. Gordon, S. Kanae, E. Kowalczyk, D. Lawrence, P. Liu, S. Lu, S. Malyshev, B. McAvaney, K. Mitchell, T. Oki, K. Oleson, A. Pitman, Y. Sud, C. Taylor, D. Verseghy, R. Vasic, Y. Xue, and T. Yamada, 2006: GLACE: The Global Land-Atmosphere Coupling Experiment. 1. Overview and results. *J. Hydrometeorol.*, **7**, 590-610, doi: 10.1175/JHM510.1.
- J52.** Kumar, S. V., C. D. Peters-Lidard, Y. Tian, P. R. Houser, J. Geiger, S. Olden, L. Lighty, J. L. Eastman, B. Doty, P. Dirmeyer, J. Adams, K. Mitchell, E. F. Wood and J. Sheffield, 2006: Land Information System - An Interoperable Framework for High Resolution Land Surface Modeling. *Env. Mod. Software*, **21**, 1402-1415, doi: 10.1016/j.envsoft.2005.07.004.
- J51.** Schneider, E. K., M. Fan, B. P. Kirtman and P. A. Dirmeyer, 2006: Potential effects of Amazon deforestation on tropical climate, COLA Technical Report 226 [Available on line at: ftp://cola.gmu.edu/pub/ctr/ctr_226.pdf], 41 pp.
- J50.** Seneviratne, S. I., R. D. Koster, Z. Guo, P. A. Dirmeyer, E. Kowalczyk, D. Lawrence, P. Liu, C.-H. Lu, D. Mocko, K.W. Oleson, and D. Verseghy, 2006: Soil moisture memory in AGCM simulations: Analysis of Global Land-Atmosphere Coupling Experiment (GLACE) data. *J. Hydrometeorol.*, **7**, 1090-1112, doi: 10.1175/JHM533.1.

2005

- J49.** Dirmeyer, P. A., 2005: The land surface contribution to boreal summer season predictability. *J. Hydrometeorol.*, **6**, 618-632, doi: 10.1175/JHM444.1.
- J48.** Zhao, M. and P. A. Dirmeyer, 2005: The effects of downward fluxes and initial conditions on the skill of climate predictions. COLA Technical Report 197 [Available online at: ftp://cola.gmu.edu/pub/ctr/ctr_197.pdf], 39pp.

2004

- J47.** Dirmeyer, P. A., and M. Zhao, 2004: Flux replacement as a method to diagnose coupled land-atmosphere model feedback. *J. Hydrometeorol.*, **5**, 1034-1048, doi: 10.1175/JHM-384.1.
- J46.** Dirmeyer, P. A., Z. Guo, and X. Gao, 2004: Comparison, validation and transferability of eight multiyear global soil wetness products. *J. Hydrometeorol.*, **5**, 1011-1033, doi: 10.1175/JHM-388.1.
- J45.** Boone, A., F. Habets, J. Noilhan, E. Blyth, D. Clark, P. Dirmeyer, Y. Gusev, I. Haddeland, R. Koster, D. Lohmann, S. Mahanama, K. Mitchell, O. Nasonova, G.-Y. Niu, A. Pitman, J. Polcher, A. B. Shmakin, K. Tanaka, B. van den

- Hurk, S. Vérant, D. Versegny, and P. Viterbo, 2004: The Rhône-aggregation land surface scheme intercomparison project. *J. Climate*, **17**, 187-208, doi: 10.1175/1520-0442(2004)017<0187:TRLSSI>2.0.CO;2.
- J44.** Gao, X., P. A. Dirmeyer, Z. Guo, M. Zhao, B. Decharme, G. Niu, and S. Mahanama, 2004: An approach for remote sensing validation of land surface schemes on a global scale. COLA Technical Report 173 [Available online at: ftp://cola.gmu.edu/pub/ctr/ctr_173.pdf], 42 pp.
- J43.** Koster, R. D., P. A. Dirmeyer, Z. Guo, G. Bonan, E. Chan, P. Cox, H. Davies, T. Gordon, S. Kanae, E. Kowalczyk, D. Lawrence, P. Liu, S. Lu, S. Malyshev, B. McAvaney, K. Mitchell, T. Oki, K. Oleson, A. Pitman, Y. Sud, C. Taylor, D. Versegny, R. Vasic, Y. Xue, and T. Yamada, 2004: Regions of strong coupling between soil moisture and precipitation. *Science*, **305**, 1138-1140, doi: 10.1126/science.1100217.
- J42.** Oleson, K. W., Y. Dai, G. Bonan, M. Bosilovich, R. Dickinson, P. Dirmeyer, F. Hoffman, P. Houser, S. Levis, G.-Y. Niu, P. Thornton, M. Vertenstein, Z.-L. Yang, and X. Zeng, 2004: Technical description of the Community Land Model (CLM). National Center for Atmospheric Research, Technical Note NCAR/TN-461+STR, doi: 10.5065/D6N877Ro.
- J41.** Zhao, M., and P. Dirmeyer, 2004: Pattern and Trend Analysis of Temperature in a Set of Seasonal Ensemble Simulations. *Geophys. Res. Lett.*, **31**, doi: 10.1029/2003GL019298.
- 2003**
- J40.** Dirmeyer, P. A., M. J. Fennessy, and L. Marx, 2003: Near surface boreal summer climate as simulated by three general circulation models. *J. Climate.*, **16**, 995-1002, doi: 10.1175/1520-0442(2003)016<0995:LSIDPO>2.0.CO;2.
- J39.** Dirmeyer, P. A., 2003: The role of the land surface background state in climate predictability. *J. Hydrometeorol.*, **4**, 599-610, doi: 10.1175/1525-7541(2003)004<0599:TROTLS>2.0.CO;2.
- J38.** Dai, Y., X. Zeng, R. E. Dickinson, I. Baker, G. Bonan, M. Bosilovich, S. Denning, P. Dirmeyer, P. Houser, G. Niu, K. Oleson, C. A. Schlosser, and Z.-L. Yang, 2003: The common land model (CLM). *Bull. Amer. Meteor. Soc.*, **84**, 1013-1023, doi: 10.1175/BAMS-84-8-1013.
- J37.** Misra, V., P. A. Dirmeyer, B. P. Kirtman, 2003: Dynamic downscaling of seasonal simulations over South America. *J. Climate*, **16**, 103-117, doi: 10.1175/1520-0442(2003)016<0103:DDOSSO>2.0.CO;2.
- J36.** Sudradjat, A., K. L. Brubaker, and P. A. Dirmeyer, 2003: Interannual variability of surface evaporative moisture sources of warm-season precipitation in the Mississippi River Basin. *J. Geophys. Res.*, **108**, 8612, doi: 10.1029/2002JD003061.
- J35.** Zhao, M., and P. Dirmeyer, 2003: Production and analysis of GSWP-2 near-surface meteorology data sets. COLA Technical Report 159 [Available online at: ftp://cola.gmu.edu/pub/ctr/ctr_173.pdf], 22pp.
- 2002**
- J34.** Koster, R. D., P. A. Dirmeyer, A. N. Hahmann, R. Ijpelaar, L. Tyahla, P. Cox, and M. J. Suarez, 2002: Comparing the degree of land-atmosphere interaction in four atmospheric general circulation models. *J. Hydrometeorol.*, **3**, 363-375, doi: 10.1175/1525-7541(2002)003<0363:CTDOLA>2.0.CO;2.
- J33.** Misra, V., P. A. Dirmeyer, B. P. Kirtman, H.-M. H. Juang, and M. Kanamitsu, 2002: Regional simulation of interannual variability over South America. *J. Geophys. Res.*, **107**, 8036, doi: 10.1029/2001JD900216.
- J32.** Misra, V., P. A. Dirmeyer, B. P. Kirtman, 2002: A comparative study of two land surface schemes in regional climate integrations over South America. *J. Geophys. Res.*, **107**, 8080, doi: 10.1029/2001JD001284.
- J31.** Reale, O., and P. A. Dirmeyer, 2002: Modeling the effect of land-surface variability on precipitation variability. Part I: General response. *J. Hydrometeorol.*, **3**, 433-450, doi: 10.1175/1525-7541(2002)003<0433:MTEOLS>2.0.CO;2.
- J30.** Reale, O., P. A. Dirmeyer, and C. A. Schlosser, 2002: Modeling the effect of land-surface variability on precipitation variability. Part II: Spatial and timescale structure. *J. Hydrometeorol.*, **3**, 451-466, doi: 10.1175/1525-7541(2002)003<0451:MTEOLS>2.0.CO;2.
- 2001**
- J29.** Dirmeyer, P. A., 2001: An evaluation of the strength of land-atmosphere coupling. *J. Hydrometeorol.*, **2**, 329-344, doi: 10.1175/1525-7541(2001)002<0329:AEOTSO>2.0.CO;2.
- J28.** Dirmeyer, P. A., 2001: Climate drift in a coupled land-atmosphere model. *J. Hydrometeorol.*, **2**, 89-100, doi: 10.1175/1525-7541(2001)002<0089:CDIACL>2.0.CO;2.
- J27.** Dirmeyer, P. A., and L. Tan, 2001: A multi-decadal global land-surface data set of state variables and fluxes. COLA Technical Report 102 [Available online at: ftp://cola.gmu.edu/pub/ctr/ctr_102.pdf], 43 pp.

- J26.** Brubaker, K. L., P. A. Dirmeyer, A. Sudradjat, B. Levy, and F. Bernal, 2001: A 36-year climatology of the evaporative sources of warm-season precipitation in the Mississippi River Basin. *J. Hydrometeor.*, **2**, 537-557, doi: 10.1175/1525-7541(2001)002<0537:AYCDOT>2.0.CO;2.
- J25.** Feddes, R. A., H. Hoff, M. Bruen, T. E. Dawson, P. de Rosnay, P. Dirmeyer, R. B. Jackson, P. Kabat, A. Kleidon, A. Lilly, and A. J. Pitman, 2001: Modelling root water uptake in hydrological and climate models. *Bull. Amer. Meteor. Soc.*, **82**, 2797-2809, doi: 10.1175/1520-0477(2001)082<2797:MRWUIH>2.3.CO;2.
- J24.** Leese, J., T. Jackson, A. Pitman, and P. Dirmeyer, 2001: GEWEX/BAHC international workshop on soil moisture monitoring, analysis and prediction for hydrometeorological and hydroclimatological applications. *Bull. Amer. Meteor. Soc.*, **82**, 1423-1430, doi: 10.1175/1520-0477(2001)082<1423:MSGBIW>2.3.CO;2.
- J23.** Schlosser, C. A., and P. A. Dirmeyer, 2001: Potential predictability of Eurasian snow cover. *Atmos. Sci. Let.*, **1**, doi: 10.1006/asle.2001.0035.

2000

- J22.** Dirmeyer, P. A., F. J. Zeng, A. Ducharne, J. Morrill, and R. D. Koster, 2000: The sensitivity of surface fluxes to soil water content in three land surface schemes. *J. Hydrometeor.*, **1**, 121-134, doi: 10.1175/1525-7541(2000)001<0121:TSOSFT>2.0.CO;2.
- J21.** Dirmeyer, P. A., 2000: Using a global soil wetness data set to improve seasonal climate simulation. *J. Climate*, **13**, 2900-2922, doi: 10.1175/1520-0442(2000)013<2900:UAGSWD>2.0.CO;2.
- J20.** Reale, O. and P. Dirmeyer, 2000: Modeling the effects of vegetation on Mediterranean climate during the Roman classical period. Part I: History and model sensitivity. *Global and Planetary Change*, **25**, 163-184, doi: 10.1016/S0921-8181(00)00002-3.
- J19.** Schlosser, C. A., and P. A. Dirmeyer, 2000: Climate variability and potential predictability over continental regions in response to SST variations. COLA Technical Report 91, Center for Ocean-Land-Atmosphere Studies, Calverton, MD, 44 pp.

1999

- J18.** Dirmeyer, P. A., 1999: Assessing GCM sensitivity to soil wetness using GSWP data. *J. Meteor. Soc. Japan*, **77**, 367-385, doi: 10.2151/jmsj1965.77.1B_367.
- J17.** Dirmeyer, P. A., A. J. Dolman, and N. Sato, 1999: The Global Soil Wetness Project: A pilot project for global land surface modeling and validation. *Bull. Amer. Meteor. Soc.*, **80**, 851-878, doi: 10.1175/1520-0477(1999)080<0851:TPPOTG>2.0.CO;2.
- J16.** Dirmeyer, P. A., and F. J. Zeng, 1999: SSiB sensitivity to infiltration and treatment of convective precipitation. *J. Meteor. Soc. Japan*, **77**, 291-303, doi: 10.2151/jmsj1965.77.1B_291.
- J15.** Dirmeyer, P. A., and K. L. Brubaker, 1999: Contrasting evaporative moisture sources during the drought of 1988 and the flood of 1993. *J. Geophys. Res.*, **104**, 19383-19397, doi: 10.1029/1999JD900222.
- J14.** Dirmeyer, P. A., and F. J. Zeng, 1999: An update to the distribution and treatment of vegetation and soil properties in SSiB. COLA Technical Report 78, 27 pp.
- J13.** Oki, T., T. Nishimura, and P. Dirmeyer, 1999: Assessment of annual runoff from land surface models using Total Runoff Integrating Pathways (TRIP). *J. Meteor. Soc. Japan*, **77**, 235-255, doi: 10.2151/jmsj1965.77.1B_235.

Prior to 1999

- J12.** Dirmeyer, P. A., 1998: Land-sea geometry and its effect on monsoon circulations. *J. Geophys. Res.*, **103**, 11,555-11,572, doi: 10.1029/98JD00802.
- J11.** Dirmeyer, P. A., and F. J. Zeng, 1997: A two-dimensional implementation of the Simple Biosphere (SiB) model. COLA Technical Report 48 [Available online at: <http://cola.gmu.edu/reps/rep48/colarep48.html>], 30 pp.
- J10.** Dirmeyer, P. A., J. L. Kinter, and B. E. Doty, 1997: Predicting wintertime skill from ensemble characteristics in the NCEP medium range forecasts over North America. COLA Technical Report 42 [Available online at: <http://cola.gmu.edu/reps/rep42/colarep42.html>], 31 pp.
- J9.** Oki, T., T. Nishimura, and P. Dirmeyer, 1997: Validating estimates of land surface parameterizations by annual discharge using Total Runoff Integrating Pathways. *J. Japan Soc. Hydrol. Water Resour.*, **9**, 416-425, doi: 10.3178/jjshwr.10.416.

- J8.** Kinter, J. L., D. DeWitt, P. A. Dirmeyer, M. J. Fennessy, B. P. Kirtman, L. Marx, E. K. Schneider, J. Shukla, and D. M. Straus, 1997: The COLA atmosphere-biosphere general circulation model. Volume 1: Formulation. COLA Technical Report 51 [Available online at: <http://cola.gmu.edu/reps/rep51/colarep51.html>], 46 pp.
- J7.** Shukla J., Dan Paolino, Ben Kirtman, David DeWitt, Paul Dirmeyer, Brian Doty, Mike Fennessy, Bohua Huang, James Kinter, Larry Marx, Edwin Schneider, David Straus, Z. Zhu, 1997: A Forecast of Precipitation and Surface Air Temperature in North America for Winter (JFM) 1998, COLA Technical Report 50 [Available online at: <http://cola.gmu.edu/reps/rep50/colarep50.html>], 14pp.
- J6.** Dirmeyer, P. A., and J. Shukla, 1996: The effect on regional and global climate of expansion of the world's deserts. *Quart. J. Roy. Meteor. Soc.*, **122**, 451-482, doi: 10.1002/qj.49712253008.
- J5.** Xue, Y., H.G. Bastable, P. A. Dirmeyer, and P. J. Sellers, 1996: Sensitivity of simulated surface fluxes to changes in land surface parameterizations. *J. Appl. Meteor.*, **35**, 386-400, doi: 10.1175/1520-0450(1996)035<0386:SOSSFT>2.0.CO;2.
- J4.** Dirmeyer, P. A., 1995: Problems in initializing soil wetness. *Bull. Amer. Meteor. Soc.*, **76**, 2234-2240.
- J3.** Dirmeyer, P. A., 1994: Vegetation stress as a feedback mechanism in mid-latitude drought. *J. Climate*, **7**, 1463-1483, doi: 10.1175/1520-0442(1994)007<1463:VSAAFM>2.0.CO;2.
- J2.** Dirmeyer, P. A. and J. Shukla, 1994: Albedo as a modulator of climate response to tropical deforestation. *J. Geophys. Res.*, **99**, 20,863-20,877, doi: 10.1029/94JD01311.
- J1.** Doddridge, B. G., P. A. Dirmeyer, J. T. Merrill, S. J. Oltmans, and R. R. Dickerson, 1994: Interannual variability over the eastern North Atlantic ocean: Chemical and meteorological evidence for tropical influence on regional-scale transport in the extratropics. *J. Geophys. Res.*, **99**, 22,923-22,935, doi: 10.1029/94JD02084.

Books and Chapters:

In Preparation

Dirmeyer, P. A., and E. M Blyth: *The Land-Atmosphere System*, Cambridge University Press.

Published

- B11.** Bombardi, R. J., A. B. Tawfik, L. Marx, P. A. Dirmeyer, and J. L. Kinter III, 2018: Convection initiation in climate models using the heated condensation framework: A review. [**Chapter 3** in: *Current Trends in the Representation of Physical Processes in Weather and Climate Models* (D. Randall, J. Srinivasan and R. S. Nanjundiah Eds.)], Springer, 51-70.
- B10.** Dirmeyer, P. A., P. Gentine, M. B. Ek, and G. Balsamo, 2018: Land Surface Processes Relevant to S2S Prediction. [**Chapter 8** in: *The Gap Between Weather and Climate Forecasting: Sub-Seasonal to Seasonal Prediction* (A. W. Robertson and F. Vitart Eds.)], Elsevier, 166-182.
- B9.** Dirmeyer, P. A., C. Peters-Lidard, and G. Balsamo, 2015: Land-Atmosphere Interactions and the Water Cycle. [**Chapter 8** in: *Seamless Prediction of the Earth System: from Minutes to Months* (G Brunet, S Jones, PM Ruti Eds.)], World Meteorological Organization (WMO-No. 1156), Geneva, (also available in French and Spanish).
- B8.** Wei, J., P. A. Dirmeyer, Z. Guo and L. Zhang, 2012: Impact of Atmospheric Variability on Soil Moisture-Precipitation Coupling. [**Chapter** in: *Climate Variability - Some Aspects, Challenges and Prospects*, A. Hannachi Ed.], InTech, Rijeka.
- B7.** Randall, D. A. R. A. Wood, S. Bony, R. Colman, T. Fichet, J. Fyfe, V. Kattsov, A. Pitman, J. Shukla, J. Srinivasan, R. J. Stouffer, A. Sumi, K. E. Taylor, K. AchutaRao, R. Allan, A. Berger, H. Blatter, A. Boone, C. Bretherton, A. Broccoli, V. Brovkin, W. Cai, M. Claussen, P. Dirmeyer, C. Doutriaux, H. Drange, J.-L. Dufresne, S. Emori, P. Forster, A. Frei, A. Ganopolski, P. Gent, P. Gleckler, H. Goosse, R. Graham, J. M. Gregory, R. Gudgel, A. Hall, S. Hallegatte, H. Hasumi, A. Henderson-Sellers, H. Hendon, K. Hodges, M. Holland, A. A. M. Holtslag, E. Hunke, P. Huybrechts, W. Ingram, F. Joos, B. Kirtman, S. Klein, R. Koster, P. Kushner, J. Lanzante, M. Latif, N.-C. Lau, M. Meinshausen, A. Monahan, J. M. Murphy, T. Osborn, T. Pavlova, V. Petoukhov, T. Phillips, S. Power, S. Rahmstorf, S. C. B. Raper, H. Renssen, D. Rind, M. Roberts, A. Rosati, C. Schär, A. Schmittner, J. Scinocca, D. Seidov, A. G. Slater, J. Slingo, D. Smith, B. Soden, W. Stern, D. A. Stone, K. Sudo, T. Takemura, G. Tselioudis, M. Webb, M. Wild, 2007: Climate models and their evaluation. [**Chapter** in: *Climate Change 2007: The physical science basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC*, Cambridge University Press, 589-662.

- B6.** Kabat, P., M. Claussen, P. A. Dirmeyer, J. H. C. Gash, L. Bravo de Guenni, M. Meybeck, R. A. Pielke Sr., C. J. Vörösmarty, R. W. A. Hutjes, and S. Lütkeemeier (Eds.), 2004: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Springer Verlag, Berlin, 566 pp. **[Book]**
- B5.** Dirmeyer, P. A. (ed), 2004: The Value of Land Surface Data Consolidation. **[Part C in: *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*]**. Springer Verlag, 245-296.
- B4.** Xue, Y., R. W. A. Hutjes, R. J. Harding, M. Claussen, S. D. Prince, T. Lebel, E. F. Lambin, S. J. Allen, P. A. Dirmeyer, and T. Oki, 2004: **Chapter A5:** The Sahelian Climate. *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Springer Verlag, 59-78.
- B3.** Koster, R. D., P. A. Dirmeyer, P. C. D. Milly, and G. L. Russell, 2001: Comparing GCM-Generated Land Surface Water Budgets Using a Simple Common Framework. **[Chapter in: *Land Surface Hydrology, Meteorology and Climate: Observations and Modeling*, V. Lakshmi, J. Albertson, and J. Schaake, eds. Water Science and Applications series], American Geophysical Union, Washington D.C., USA, 3, 95-105.**
- B2.** Dirmeyer, P. A. and J. Shukla, 1993: Observational and Modeling Studies of the Influence of Soil Moisture Anomalies on Atmospheric Circulation. **[Chapter in: *Prediction of Interannual Climate Variations* (ed. by J. Shukla)], NATO Series I, 6, Springer-Verlag, 1-23.**
- B1.** Dirmeyer, P. A., 1992: GCM Studies of the Influence of Vegetation on the General Circulation. **{Ph.D. Dissertation, Available from University of Maryland, College Park, MD 20742, U.S.A.}, 227pp.**

Newsletter Articles, Reports & White Papers:

- N33.** Chaney, N. W., Dirmeyer, P. A., K. Findell, F. Hoffman, D. Lawrence, P.-L. Ma, J. Santanello, F. Hay-Chapman, and T. Waterman, 2023: Coupling land and atmosphere sub-grid parameterizations (CLASP). *GEWEX News*, **33**(2), 8-10.
- N32.** Dirmeyer, P. A., 2019: Webinar Series Report: S2S Land sub-project. *WMO Subseasonal-to-Seasonal Prediction Project Newsletter*, **17**, 6-7, http://s2sprediction.net/file/newsletter/Newsletter%2017_Aug%202021.pdf.
- N31.** Dirmeyer, P. A., 2019: Capturing the dynamism of plant roots in models. *Editors' Highlights, Eos*, **100**, <https://eos.org/editor-highlights/capturing-the-dynamism-of-plant-roots-in-models>.
- N30.** Dirmeyer, P. A., 2018: Coupled from the Start. *Editors' Vox, Eos*, **99**, <https://eos.org/editors-vox/coupled-from-the-start>.
- N29.** Dirmeyer, P. A., 2018: The ILAMB System for Benchmarking Land Surface Models. *Editors' Highlights, Eos*, **99**, <https://eos.org/editor-highlights/the-ilamb-system-for-benchmarking-land-surface-models>.
- N28.** World Weather Research Programme / World Climate Research Programme, 2018: *WWRP/WCRP Sub-seasonal to Seasonal Prediction Project (S2S) Phase II Proposal*, WWRP Report 2018-4; WCRP Report 10/2018, 38pp [http://www.wmo.int/pages/prog/arep/wwrp/new/documents/WWRP_2018_4_S2S_Phase_II_proposal.pdf]
- N27.** World Weather Research Programme / World Climate Research Programme, 2018: *WWRP/WCRP Sub-seasonal to Seasonal Prediction Project (S2S) Phase I Final Report*, WWRP Report 2018-2; WCRP Report 6/2018, 55pp [http://www.wmo.int/pages/prog/arep/wwrp/new/documents/WWRP_2018_2_S2S_Phase_I_web.pdf]
- N26.** Dirmeyer, P. A., 2018: Wet soils elevate nighttime temperatures. *Editors' Highlights, Eos*, **99**, <https://eos.org/editor-highlights/wet-soils-elevate-nighttime-temperatures>.
- N25.** Dirmeyer, P. A., 2017: Improved simulation of gross primary productivity. *Editors' Highlights, Eos*, **98**, <https://eos.org/editor-highlights/improved-simulation-of-gross-primary-productivity>.
- N24.** Ford, T. W. and P. A. Dirmeyer, 2016: Land-atmosphere interactions and subseasonal-to-seasonal forecasting of extreme heat in the United States. *US CLIVAR Variations*, **14**(4), 30-35.
- N23.** Santanello, J. A., A. Boone, P. A. Dirmeyer, M. Ek, C. R. Ferguson, P. Gentine, B. P. Guillod, Z. Li, B. R. Linter, D. D. Turner, C. C. van Heerwaarden, D. Wu, V. Wulfmeyer, and Y. Zhang, 2015: *The Importance of Routine Planetary Boundary Layer Measurements over Land from Space*. White Paper in response to the Earth Sciences Decadal Survey Request for Information (RFI) from the National Academy of Sciences Space Studies Board, 5pp.
- N22.** Waliser, D., G. Brunet, P. Dirmeyer, H. Hendon, B. Kirtman, R. Koster, A. Kumar, H. Lin, P. Lermusiaux, E. Maloney, M. Moncrieff, M. Rixen, A. Robertson, K. Sperber, F. Vitart, and C. Zhang, 2015: *Advancing the Science and Societal Benefits of Subseasonal to Seasonal (S2S) Environmental Prediction*. White Paper in response to the

- Earth Sciences Decadal Survey Request for Information (RFI) from the National Academy of Sciences Space Studies Board, 7pp.
- N21.** Xue, Y. and P. A. Dirmeyer, 2015: Land-atmosphere interactions in monsoon regimes and future prospects for enhancing prediction. *CLIVAR Exchanges*, **66**, 28-33.
- N20.** Dirmeyer, P. A., and A. G. Turner, 2015: Introduction to the CLIVAR Exchanges issue on monsoons. *CLIVAR Exchanges*, **66**, 1-2.
- N19.** Dirmeyer, P. A., 2014: The cusp of major progress in predicting land-atmosphere interactions. *GEWEX News*, **24**(1-2), 15-18.
- N18.** Dirmeyer, P. A., D. J. Gochis, T. S. Hogue, A. Barros, C. J. Duffy, K. Friedrich, M. Hughes, W. Krajewski, and N. P. Molotch, 2014: *Advancing Hydrometeorological-Hydroclimatic-Ecohydrological Process Understanding and Predictions*. White Paper: Hydrologic-Atmospheric Community Workshop, Golden, Colorado, 12pp [Available at: <http://inside.mines.edu/~thogue/nsf-hydro-atmo-workshop/NSFHydroAtmosWorkshopWhitePaper120314FINAL.pdf>].
- N17.** Dirmeyer, P. A., E. K. Jin, J. L. Kinter III and J. Shukla, 2014: *Land Surface Modeling in Support of Numerical Weather Prediction and Sub-Seasonal Climate Prediction*. White Paper: Workshop on Land Surface Modeling in Support of NWP and Sub-Seasonal Climate Prediction, 17pp [Available at: http://cola.gmu.edu/lsm/GMU_KIAPS_White_Paper.pdf].
- N16.** Seneviratne, S. I., B. van den Hurk, D. Lawrence, G. Krinner, G. Hurtt, H. Kim, C. Derksen, T. Oki., A. Boone, M. Ek, V. Brovkin, P. Dirmeyer, H. Douville, P. Friedlingstein, S. Hagemann, R. Koster, N. de Noblet-Ducoudré, and Andy Pitman, 2014: Land processes, forcings, and feedbacks in climate change simulations: The CMIP6 "LandMIPs". *GEWEX News*, **24**(4) 6-10.
- N15.** Dirmeyer, P. A. and A. Tawfik, 2014: Validation of CFSv2 model behavior – land-atmosphere interactions and the hydrologic cycle. *Climate Prediction S&T Digest*, 38th Climate Diagnostics and Prediction Workshop Special Collection, 75-79, [available online at: <https://issuu.com/climatesti/docs/38cdpwwdigest>].
- N14.** Santanello, J. A., C. Ferguson, M. Ek, P. Dirmeyer, O. Tuinenburg, C. Jacobs, C. van Heerwaarden, K. Findell, P. Gentile, and B. Lintner, 2011: Local land-atmosphere coupling (LoCo) research: Status and results. *GEWEX News*, **21**(4), 7-9.
- N13.** Dirmeyer, P. A., Z. Guo and J. Wei, 2010: Building the case for (or against) land-driven climate predictability. *iLEAPS Newsletter*, **9**, 14-17.
- N12.** Dirmeyer, P. A., 2004: Soil moisture - muddy prospects for a clear definition. *GEWEX News*, **14**, No. 3, 11-12.
- N11.** Gao, X., P. A. Dirmeyer, and T. Oki, 2004: Update on the Second Global Soil Wetness Project. *GEWEX News*, **14**, No. 3, 10.
- N10.** Dirmeyer, P. A., 2003: GLASS Science Panel Meeting (Recent Results and New Initiatives). *GEWEX News*, **13**, No 4, 9-11.
- N9.** Koster, R., Z. Guo and P. Dirmeyer, 2003: First results from GLACE (Impact of soil moisture on precip prediction). *GEWEX News*, **13**, No 4, 6-7.
- N8.** Koster, R., Z. Guo and P. Dirmeyer, 2003: GLACE: Quantifying Land-Atmosphere Coupling Strength Across a Broad Range of Climate Models. *CLIVAR Exchanges*, **28**, 14-15.
- N7.** Dirmeyer, P. A., T. Oki and X. Gao, 2002: GSWP-2 kickoff workshop. *GEWEX News*, **12**, No 4, 11-12.
- N6.** *Lead Author:* International GEWEX Project Office, 2002: GSWP-2: The Second Global Soil Wetness Project Science and Implementation Plan. IGPO Publication Series No. 37, 75 pp.
- N5.** Polcher, J., P. Cox, P. Dirmeyer, H. Dolman, H. Gupta, A. Henderson-Sellers, P. Houser, R. Koster, T. Oki, A. Pitman, and P. Viterbo, 2000: GLASS: Global land-atmosphere system study. *GEWEX News*, **10**, No 2, 3-5.
- N4.** *Lead Author:* International GEWEX Project Office, 1998: Global Soil Wetness Project: Preliminary report on the pilot phase. IGPO Publication Series No. 29, 48 pp.
- N3.** *Contributing Author:* International GEWEX Project Office, 1998: Land surface parameterizations / soil vegetation atmosphere transfer schemes workshop: Conclusions and Working Group Reports. IGPO Publication Series No. 31, 77 pp.
- N2.** Dirmeyer, P. A., 1997: The Global Soil Wetness Project. *GEWEX News*, **7**, No. 2, 3-6.
- N1.** *Contributing Author:* International GEWEX Project Office, 1995: Global Soil Wetness Project, 47 pp.

Invited Seminars:

- S43.** Dirmeyer, P. A., and the CLASP team, 2023: Soil Moisture Heterogeneity and Triggering of Atmospheric Convection (online presentation). Science of 10-km L-band Radiometry, Pasadena, CA. USA, 10-12 October 2023.
- S42.** Dirmeyer, P. A., 2023: The land subproject of S2S (presented virtually). S2S Summit, Reading, UK, 3-7 July 2023.
- S41.** "SMAP and Global Land-Atmosphere Coupling Metrics: Accounting for Measurement Noise", AOES Seminar Series, George Mason University, 8 March 2023.
- S40.** "Land Atmosphere Validation and Implications from Coupling Metrics", NOAA R2O Physics Development Team meeting, online, 10 October 2022.
- S39.** "Land Atmosphere Interactions: What is needed to improve their representation in Land Surface Models", Land Surface Modeling Summit, Oxford, UK, 12 September 2022.
- S38.** "The Role of Land-Atmosphere Feedbacks in S2S Predictability", NCAR Advanced Study Program Workshop on S2S Science and Predictions, 14 July 2022.
- S37.** "Land-Climate Interactions", Wageningen University, Netherlands, 1 July 2022.
- S36.** "The Role of Land-Atmosphere Feedbacks in Weather-to-Subseasonal Predictability", NOAA Physical Sciences Lab seminar, online, 31 August 2021.
- S35.** "The Role of Land-Atmosphere Feedbacks in S2S Predictability", NCAR Advanced Study Program Workshop on Subseasonal-to-Seasonal Science and Predictions, online, 5 August 2021.
- S34.** "Land Surface and S2S Predictions", NCAR Advanced Study Program Summer Colloquium on Subseasonal-to-Seasonal Science and Predictions, online, 20 July 2021.
- S33.** "Seamless forecast construction and validation across subseasonal time scales", International Subseasonal-to-Seasonal (S2S) Prediction Project webinar, 28 October 2020.
- S32.** "Indications of surface and sub-surface hydrologic properties from SMAP", SMAP DAART/ST meeting, online, 21 October 2020.
- S31.** "The role of the land surface in weather and climate" National Center for Atmospheric Research, Climate and Global Dynamics Laboratory, Boulder, CO, USA, 4 September 2018.
- S30.** "The emerging role of the land surface in weather and climate prediction" European Centre for Medium-range Weather Forecasts, Reading, UK, 25 July 2018.
- S29.** "The emerging role of the land surface in weather and climate prediction" Centre for Ecology and Hydrology, Wallingford, UK, 13 July 2018.
- S28.** "Land-atmosphere interactions in nature and models" AOES Seminar Series, George Mason University, 25 October 2017.
- S27.** "Land-atmosphere interactions in nature and models" West Virginia University Geography Colloquium series, 6 October 2017.
- S26.** "Land-atmosphere interactions in models and observations" NASA Goddard Space Flight Center, Global Modeling and Data Assimilation Office, 23 May 2017.
- S25.** "What water vapor back-trajectory analysis can tell us about climate variability" Invited Senior Leonardo Lecture, From Evaporation to Precipitation: The Atmospheric Moisture Transport, 2016 EGU Leonardo Conference, Ourense, Spain, 25-27 October 2016.
- S24.** "Land-atmosphere feedbacks" ICTP-IITM-COLA Targeted Training Activity (TTA): Towards Improved Monsoon Simulations, International Centre for Theoretical Physics, Trieste, Italy, 13-17 June 2016.
- S23.** "The Land-Atmosphere Coupling Paradigm in the Operational NWS Forecast Model: Consequences for Hydrologic Predictability." Observations and Modeling Across Scales: Symposium in Honor of Eric Wood, Princeton, New Jersey, USA, 2-3 June 2016.
- S22.** "Land surface processes and interactions with the atmosphere" ECMWF Annual Seminar, Reading, UK, 1-4 September 2015.
- S21.** "Climate Model Perspectives" Alpine Summer School, Course XXIII on Land-Atmosphere Interactions, Valsavaranche, Valle d'Aosta, Italy, 22 June – 1 July 2015.

- S20.** "Metrics in Land-Atmosphere Coupling" Alpine Summer School, Course XXIII on Land-Atmosphere Interactions, Valsavaranche, Valle d'Aosta, Italy, 22 June – 1 July 2015.
- S19.** "Why Water in the Soil Now Matters for Weather This Summer" Mason Water Forum Seminar, George Mason University, Fairfax, Virginia, 3 April 2015
- S18.** "Drought forecasts and land-atmosphere interactions in the NOAA climate model" AOES Climate Dynamics seminar, George Mason University, 6 November 2013.
- S17.** "Historical and future trends in land-atmosphere interactions from CMIP5" Gordon Research Conference on Radiation and Climate, New London, NH, USA, 9 July 2013.
- S16.** "Connections between precipitation extremes and evaporation sources" Mini-symposium on land-atmosphere interactions, Wageningen University, Netherlands, 15 April 2013.
- S15.** "Trends in land-atmosphere interactions from CMIP5 simulations" Workshop on the Climate Dynamics of Tropical Africa, Johns Hopkins University, 15 November 2012.
- S14.** "Evaporative moisture sources for African precipitation and diagnosis of extremes" Workshop on the Climate Dynamics of Tropical Africa, Johns Hopkins University, 15 November 2012.
- S13.** "Land-Climate Interactions – Past, Present and Future" Seminar presented at the Department of Marine, Earth, & Atmospheric Sciences, North Carolina State University, 31 July 2012.
- S12.** "Land-Atmosphere Interaction and the Global Water Cycle" Seminar presented at the Department of Atmospheric, Oceanic and Earth Science, George Mason University, 5 April 2011.
- S11.** "Land-atmosphere interaction and the water cycle" Seminar presented at SEAS Colloquium in Climate Science (SCiCS), Columbia University, 3 December 2009.
- S10.** "Do Global Models Properly Represent the Feedback Between Land and Atmosphere?" Seminar presented at NASA/GSFC Climate and Radiation Branch, Greenbelt, Maryland, USA 7 September 2005.
- S9.** "The interplay between soil moisture and climate" Seminar presented at National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA 10 May 2006.
- S8.** "Global Soil Wetness Products - What Can We Believe?" Seminar presented at the Department of Meteorology, University of Maryland, College Park, Maryland, USA, 16 October, 2003.
- S7.** "Land-Atmosphere Interactions and Climate Variability." Seminar presented at the Texas Center for Climate Studies, Texas A&M University, College Station, Texas, USA, 24 October, 2001.
- S6.** "The evaporative sources of moisture supplying rainfall over the central United States" Seminar presented at the Dept. of Civil Engineering, University of Maryland, 3 May 1999.
- S5.** "The Global Soil Wetness Project." Institute for Computational Sciences and Informatics seminar, George Mason University, Fairfax, Virginia, USA, 3 November 1997.
- S4.** "The Global Soil Wetness Project." NASA/GSFC Climate and Radiation Branch seminar, Greenbelt, Maryland, USA, 17 September 1997.
- S3.** "The Global Soil Wetness Project." NCEP sack lunch seminar, Camp Springs, Maryland, USA, 8 July 1997.
- S2.** "Aspects of tropical deforestation and their effects on climate." Seminar presented at the Department of Meteorology, Florida State University, Tallahassee, Florida, USA, 20 January 1994.
- S1.** "GCM studies of vegetation and climate: From drought to deforestation." Seminar presented at the Ralph M. Parsons Laboratory, Massachusetts Institute of Technology, Boston, Massachusetts, USA, 14 June 1993.

Conference and Workshop Presentations:

- C278.** Dirmeyer, P. A., F. M. Hay-Chapman, J. Simon, and N. Chaney, 2024: Thermodynamic constraints on the sensitivity of boundary layer clouds to land surface flux partitioning. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, J5B3.
- C277.** Davis, B., and P. A. Dirmeyer, 2024: Inferring surface flux partitioning over land from an evolving atmospheric boundary layer. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, H.
- C276.** Ferguson, C. R., V. G. Wulfmeyer, P. A. Dirmeyer, M. H. Cosh, J. D. Lundquist, L. F. Bosart, C. N. Kroll, P. J. van Oevelen, J. D. Wood, D. Fitzjarrald, A. Schreiner-McGraw, Y. Zhang, D. D. Turner, M. B. Ek, A. French, and G. Abramowitz, 2024: Integrated ground, sub-orbital, and orbital land-atmosphere feedback observatories to

- advance understanding of agriculture-climate interactions in the U.S.. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, H.
- C275.** Fowler, M. D., A. Herrington, R. B. Neale, T. Waterman, D. Lawrence, F. M. Hay-Chapman, P. A. Dirmeyer, J. T. Bacmeister, and N. Chaney, 2024: Assessing the Sensitivity of Atmospheric Convective Updrafts to Subgrid Land Surface Heterogeneity in CESM2. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, J8B6.
- C274.** Gaal, R., J. L. Kinter, P. A. Dirmeyer, and B. Singh, 2024: Identifying the mechanism of interaction between soil moisture state and summertime MCS initiations in weakly-forced synoptic environments using convective-permitting simulations. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, J8B4.
- C273.** Hay-Chapman, F. M., P. A. Dirmeyer, M. D. Fowler, T. Waterman, and N. Chaney, 2024: Subgrid surface heterogeneity and land-atmosphere interactions: a hierarchy of parameterizations for global climate models. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, J7B5.
- C272.** Kim, S., P. A. Dirmeyer and M. J. Barlage, 2024: Evaluation of the Unified Forecast System subseasonal to seasonal convective available potential energy and its relationship to model biases. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, H.
- C271.** Kim, S., and P. A. Dirmeyer, 2024: Principal component analysis as a tool for detection of land-atmosphere freeback regimes using flux site observations. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, H.
- C270.** Tavakoli, N., and P. A. Dirmeyer, 2024: Analysis of the SMAP Daily Soil Moisture Time Series through Power Spectrum-Adjustment Method Utilizing Additional Datasets. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, H.
- C269.** Tokuda, D., and P. A. Dirmeyer, 2024: Soil moisture-latent heat flux coupling in climate modeling: insights and implications from the offline land model. American Meteorological Society 38th Conference on Hydrology, Baltimore, MD, USA, H.
- C268.** Gay, B., A. Zuefle, N. J. Pastick, A. H. Armstrong, J. Watts., P. A. Dirmeyer, K. R. Miner, K. Wessels, J. J. Qu and C. E. Miller, 2023: Investigating high-latitude permafrost carbon dynamics with artificial intelligence and earth system data assimilation, American Geophysical Union Fall Meeting, San Francisco, CA, USA A51X-2295.
- C267.** Gay, B., A. Zuefle, N. J. Pastick, A. H. Armstrong, J. Watts., P. A. Dirmeyer, K. R. Miner, K. Wessels, J. J. Qu and C. E. Miller, 2023: Investigating permafrost carbon dynamics in Alaska with artificial intelligence, American Geophysical Union Fall Meeting, San Francisco, CA, USA, C52B-08.
- C266.** Hay-Chapman, F. M., P. A. Dirmeyer, M. D. Fowler, T. Waterman, and N. Chaney, 2023: Land-atmosphere interactions over sub-grid scale heterogeneous surfaces and their representation in earth system models with a suite of up-and-coming parameterizations, American Geophysical Union Fall Meeting, San Francisco, CA, USA, A33S-2825.
- C265.** Tavakoli, N., and P. A. Dirmeyer, 2023: Improving the SMAP daily soil moisture time series with land surface model datasets using power spectrum-adjustment techniques, American Geophysical Union Fall Meeting, San Francisco, CA, USA, H13M-1630.
- C264.** Tokuda, D., and P. A. Dirmeyer, 2023: Evaluating the consistency of soil moisture-evaporation relationship of a land surface model among different forcing and coupled experiments: A CMIP6 study, American Geophysical Union Fall Meeting, San Francisco, CA, USA, A33S-2808.
- C263.** Seo, E., P. A. Dirmeyer, and M. Barlage, 2023: Evaluation of land-atmosphere coupling processes and climatological bias in the UFS global coupled model. Unifying Innovations in Forecasting Capabilities Workshop, Boulder, CO, USA, 24-28 July 2023.
- C262.** Waterman, T., A. Bragg, F. Hay-Chapman, P. Dirmeyer, M. Fowler, and N. Chaney, 2023: Parameterizing the Large Scale Impact of Land Surface Heterogeneity Induced Circulations on Convective Cloud Development. European Geophysical Union General Assembly, Vienna, Austria, EGU23-10938, doi: 10.5194/egusphere-egu23-10938.
- C261.** Dirmeyer, P. A., F. M. Hay-Chapman, and B. A. Davis, 2023: Thermodynamic constraints on the triggering of convection over heterogeneous surfaces. Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Project meeting, GFDL, Princeton, NJ, USA, 17-18 May 2023.

- C260.** Hay-Chapman, F. M. and P. A. Dirmeyer, 2023: Subgrid-scale land surface heterogeneity and its relation with climate model behavior and fidelity. Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Project meeting, GFDL, Princeton, NJ, USA, 17-18 May 2023.
- C259.** Bayar, A. S., M. T. Yilmaz, İ. Yücel, and P. A. Dirmeyer, 2023: Greater rate of climate zone change in CMIP6 Earth System Models due to stronger warming rates, European Geophysical Union General Assembly, Vienna, Austria, EGU23-16537, doi: 10.5194/egusphere-egu23-16537.
- C258.** Dirmeyer, P. A., E. Seo, N. Tavakoli, J. Santanello, and M. Jung, 2023: SMAP and Global Land-Atmosphere Coupling Metrics: Accounting for Measurement Noise. SMAP Science Team Meeting #17, (presented virtually), Pasadena, CA, USA, 15-17 February 2023.
- C257.** Fowler, M. D., R. B. Neale, D. M. Lawrence, J. S. Simon, V. E. Larson, P. A. Dirmeyer, M. Huang, J. E. Truesdale and N. W. Chaney, 2023: Investigating the Atmospheric Response to a New Parameterization of Subgrid Surface Heterogeneity in CESM2, American Meteorological Society 36th Conference on Hydrology, Denver, CO, USA, J2B.4.
- C256.** Hay-Chapman, F. M., P. A. Dirmeyer, M. D. Fowler, and J. S. Simon, 2022: Examining the Fidelity of Climate Model Simulations over Sub-grid Scale Heterogeneous Land Surfaces, American Geophysical Union Fall Meeting, Chicago, IL, USA, H12I-o801.
- C255.** Fowler, M. D., R. B. Neale, D. M. Lawrence, J. S. Simon, V. E. Larson, P. A. Dirmeyer, M. Huang, J. E. Truesdale and N. W. Chaney, Assessing the Atmospheric Response to Subgrid Surface Heterogeneity in CESM2 and WRF-LES, American Geophysical Union Fall Meeting, Chicago, IL, USA, H11A-01.
- C254.** Bayar, A. S., M. T. Yilmaz, İ. Yücel, and P. A. Dirmeyer, 2022: Greater Rate of Köppen-Geiger Climate Zone Change in CMIP6 Earth System Models, American Geophysical Union Fall Meeting, Chicago, IL, USA, GC24D-02.
- C253.** Ferguson, C. R., L. F. Bosart, P. A. Dirmeyer, J. D. Lundquist, C. N. Kroll, M. H. Kosh, A. N. French, P. van Oevelen, D. D. Turner, G. Abramowitz, M. B. Ek, K. A. Lohse, and V. Wulfmeyer, 2022: American Geophysical Union Fall Meeting, Chicago, IL, USA, H45G-1562.
- C252.** Keune, J., Schumacher, D. L., Dirmeyer, P., and Miralles, D. G., 2022: Drought self-propagation in drylands through moisture recycling, EGU General Assembly 2022, Vienna, Austria, EGU22-9139, doi: 10.5194/egusphere-egu22-9139.
- C251.** Yin, Z., K. L. Findell, P. A. Dirmeyer, E. Shevliakova, S. Malyshev, K. Ghannam, N. Raoult, and Z. Tan, 2022: Daytime-only-mean data can enhance our understanding of land-atmosphere coupling, European Geophysical Union General Assembly 2021, EGU22-6467, doi: 10.5194/egusphere-egu22-6467.
- C250.** Dirmeyer, P. A. and A. Abdolghafoorian, 2022: Cause-and-effect analysis of the interactions among surface soil moisture and turbulent surface fluxes, American Meteorological Society 36th Conference on Hydrology, Houston, TX, USA, J1A.4.
- C249.** Hay-Chapman, F., and P. A. Dirmeyer, 2022: Evaluating the sensitivity and variability of the atmospheric leg of land-atmosphere coupling over the Southern Great Plains using a novel single-column modeling framework, American Meteorological Society 36th Conference on Hydrology, Houston, TX, USA, J1A.6.
- C248.** Tong, D., Y. Liu, Y. Li, P. A. Dirmeyer, J. L. Kinter, S. Kondragunta, and X. Zhang, 2022: Unprecedented death toll of the 2020 western United States wildfires, American Meteorological Society 13th Conference on Environment and Health, Houston, TX, USA, J3.6.
- C247.** Ferguson, C. R., L. F. Bosart, P. A. Dirmeyer, J. D. Lundquist, C. N. Kroll, M. Cosh, A. French, P. Van Oevelen, D. D. Turner, G. Abramowitz, M. B. Ek, K. A. Lohse, and V. Wulfmeyer, 2022: Scoping of a next-generation NASA calibration/validation strategy to meet preeminent ecohydrological monitoring and modeling challenges, American Meteorological Society 36th Conference on Hydrology, Houston, TX, USA, J6A.1.
- C246.** Seo, E., and P. A. Dirmeyer, 2021: Improvement of the ESA CCI daily soil moisture time series with physically-based land surface model datasets using a Fourier transform method, American Geophysical Union Fall Meeting, New Orleans, LA, USA, H54B-o8.
- C245.** Benson, D. O., and P. A. Dirmeyer, 2021: Impact of land-atmosphere interaction fidelity on skill of heatwave prediction in subseasonal forecast models, American Geophysical Union Fall Meeting, New Orleans, LA, USA, A41G-07.

- C244.** Hsu, H., and P. A. Dirmeyer, 2021: Characterizing soil moisture regimes, linear and nonlinear soil moisture-latent heat flux dependencies in observations and models, American Geophysical Union Fall Meeting, New Orleans, LA, USA, H25M-1191.
- C243.** Hay Chapman, F., and P. A. Dirmeyer, 2021: Diagnosing boundary layer coupling sensitivity to evaporative fraction using a novel single-column modeling approach: Impacts and applications, American Geophysical Union Fall Meeting, New Orleans, LA, USA, H25M-1192.
- C242.** Simon, J. S., A. D. Bragg, P. A. Dirmeyer, K. Findell, Z. Yin, T. Waterman, F. Hay-Chapman and N. W. Chaney, 2021: A statistical analysis of the atmospheric response to land-surface heterogeneity using large-eddy simulation over the Southern Great Plains site in Oklahoma, American Geophysical Union Fall Meeting, New Orleans, LA, USA, H23D-08.
- C241.** Halder, S., and P. A. Dirmeyer, 2021: Impact of the delayed hydrological effect of Eurasian snow cover on the S2S variability of the Indian summer monsoon rainfall, American Geophysical Union Fall Meeting, New Orleans, LA, USA, A33E-05.
- C240.** Dirmeyer, P. A. 2021: An overview of land-atmosphere feedbacks as a source of predictability on S2S timescales. 46th Climate Diagnostics and Prediction Workshop, online, 27 October 2021.
- C239.** Hsu, H., and P. A. Dirmeyer, 2021: Spatial discrepancy of global soil moisture regimes among climate models, reanalyses and satellite-based data sets. SMAP DAART/Science Team meeting, online, 29 September 2021.
- C238.** Simon, J., T. Waterman, F. Hay-Chapman, P. Dirmeyer, A. Bragg, and N. Chaney, 2021: An analysis of the importance of a fully-coupled atmosphere and land-surface when considering the impact of multi-scale land spatial heterogeneity on cloud development. European Geophysical Union General Assembly 2021, EGU21-13379, doi: 10.5194/egusphere-egu21-13379.
- C237.** Miralles, D. G., D. L. Schumacher, J. Keune, and P. A. Dirmeyer, 2021: Drought spatiotemporal propagation via land feedbacks. European Geophysical Union General Assembly 2021, EGU21-1505, doi: 10.5194/egusphere-egu21-1505.
- C236.** Benson, D. O., P. A. Dirmeyer, 2021: Land-atmosphere interactions in the Subseasonal Experiment project (SubX) forecast models and their role in heatwave prediction. American Meteorological Society 35th Conference on Hydrology, *Virtual*, 11.6.
- C235.** Hay-Chapman, F. M., P. A. Dirmeyer, 2021: Diagnosing sensitive land-atmosphere coupling days and investigating the impact of land surface heterogeneity on the overlying atmosphere. American Meteorological Society 35th Conference on Hydrology, *Virtual*, 4.8.
- C234.** Dong, J., P. A. Dirmeyer, F. Lei, M. C. Anderson, C. Hain, T. R. Holmes, and W. Crow, 2021: Bare soil evaporation stress determines soil moisture - evapotranspiration coupling strength bias in land surface modeling. American Meteorological Society 35th Conference on Hydrology, *Virtual*, 9B5.
- C233.** Dirmeyer, P. A., F. M. Hay-Chapman, K. Huang, S. Knapp, M. Korendyke, N. Lydeen and Z. Manthos, 2020: Evaluation of land-atmosphere coupling and the Budyko relationship in CMIP6 models American Geophysical Union Fall Meeting, *Virtual*, A052-07.
- C232.** Abdolghafoorian, A., and P. A. Dirmeyer, 2020: Detecting the magnitude and direction of information flow between land and atmosphere. American Geophysical Union Fall Meeting, *Virtual*, H199-0006.
- C231.** Benson, D. O., and P. A. Dirmeyer, 2020: Temperature and extreme soil moisture relationships in Subseasonal Experiment project (SubX) forecast models and their impact on heatwave prediction. American Geophysical Union Fall Meeting, *Virtual*, A209-07.
- C230.** Hsu, H., and P. A. Dirmeyer, 2020: Nonlinearity and multivariate dependencies in land-atmosphere coupling. American Geophysical Union Fall Meeting, *Virtual*, H199-0019.
- C229.** Simon, J., P. A. Dirmeyer, T. Waterman, F. M. Hay-Chapman, G. G. Katul, and N. W. Chaney, 2020: Semi-coupling of a field-scale resolving land-surface model and WRF-LES to investigate the influence of land-surface heterogeneity on PBL development. American Geophysical Union Fall Meeting, *Virtual*, A080-04.
- C228.** Dong, J., P. A. Dirmeyer, F. Lei, M. B. Anderson, T. Holmes, C. Hain, and W. Crow, 2020: Bare soil evaporation stress determines soil moisture - evapotranspiration coupling strength bias in land surface modeling. American Geophysical Union Fall Meeting, *Virtual*, H199-0003.

- C227.** Dirmeyer, P. A., and J. Santanello, 2020: Soil Moisture as Regulator of Water and Energy Cycle Feedbacks between Land and Atmosphere. SMAP Science Team Meeting #14, online.
- C226.** Simon, J., K. Ghannam, G. I. Katul, P. Dirmeyer, K. Findell, J. Santanello, and N. Chaney, 2020: An investigation into the influence of high-resolution land-surface heterogeneity on atmospheric dynamics. European Geophysical Union, Conference on Atmospheric Science, online, AS2.6 EGU2020-20762.
- C225.** Dirmeyer, P. A., J. Santanello, K. Findell, A. Abdolghafoorian, and T. Lawston, 2020: CLASP Virtual Project Meeting Diagnostics Group Report, Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Project Meeting, online.
- C224.** Dirmeyer, P. A., G. Balsamo, E. M. Blyth, R. Morrison, and H. M. Cooper, 2020: Land-atmosphere interactions may have exacerbated the drought and heat wave over northern Europe during summer 2018. American Meteorological Society Fifth Symposium on US-International Partnerships, Boston, MA, USA, 3.4.
- C223.** Benson, D. O., and P. A. Dirmeyer, 2020: How dry soil moisture extremes exacerbate heat waves over the contiguous United States. American Meteorological Society 33rd Conference on Climate Variability and Change, Boston, MA, USA, J21.3.
- C222.** Hsu, H., and P. A. Dirmeyer, 2020: Using temporal information partitioning networks (TIPnets) to assess land-atmosphere coupling. American Meteorological Society 34rd Conference on Hydrology, Boston, MA, USA, 1B.6.
- C221.** Ford, T. W., and P. A. Dirmeyer, 2019: Diagnostic verification of heat wave forecasts using SubX. American Geophysical Union Fall Meeting, San Francisco, CA, USA, A34E-05.
- C220.** Dirmeyer, P. A., D. O. Benson, G. Balsamo, E. M. Blyth, R. Morrison, and H. M. Cooper, 2019: Land states, feedbacks and sensitivities during the 2018 drought and heatwave in Northern Europe. Workshop on Land-Atmosphere Feedbacks and Dry Extremes Under a Changing Climate (Dry-2-Dry), Ghent, Belgium.
- C219.** Dirmeyer, P. A., and T. W. Ford, 2019: Achieving seamless verification across sub-seasonal time scales from weather to climate. Workshop on Predictability, Dynamics and Applications Research Using the TIGGE and S2S Ensembles. European Centre for Medium-Range Weather Forecasts, Reading, UK.
- C218.** Dirmeyer, P. A., 2019: Land-atmosphere coupling metric applications in arid and semiarid regions (invited). American Meteorological Society 33rd Conference on Hydrology, Phoenix, AZ, USA, 3B.2.
- C217.** Chen, L., and P. A. Dirmeyer, 2019: Response in diurnal cycle of land surface and air temperature to deforestation (invited). American Meteorological Society 32nd Conference on Climate Variability and Change, Phoenix, AZ, USA, 14C.1.
- C216.** Mariotti, A., E. A. Barnes, E. K. M. Chang, A. L. Lang, P. A. Dirmeyer, K. Pegion, and D. Barrie, 2019: Bridging the weather-to-climate prediction gap: Progress by the NOAA S2S Prediction Task Force. American Meteorological Society 33rd Conference on Hydrology, Phoenix, AZ, USA, 11B.3.
- C215.** Shin, C.-S., B. Huang, P. A. Dirmeyer, and A. Kumar, 2019: Exploring the sensitivity of US drought prediction skill to land initial states. American Meteorological Society 33rd Conference on Hydrology, Phoenix, AZ, USA, J9.4.
- C214.** Abolafia-Rosenzweig, R., B. Livneh, Y. Xia, D. Mocko, P. A. Dirmeyer, S. V. Kumar, C. D. Peters-Lidard, H. Wei, and J. Kain, 2019: Comparing operational NLDAS-2 and experimental NLDAS-3 soil moisture with observational soil moisture data from in-situ networks and SMAP remote sensing. American Meteorological Society 33rd Conference on Hydrology, Phoenix, AZ, USA, 2B.3.
- C213.** Dirmeyer, P. A., 2018: Exploiting land surface data for sub-seasonal prediction (invited). American Geophysical Union Fall Meeting, Washington, DC, USA, A32D-02.
- C212.** Dirmeyer, P. A., 2018: Synthesizing water and energy cycle data for coupling metrics to understand land-atmosphere interactions. American Geophysical Union Fall Meeting, Washington, DC, USA, H33K-2229.
- C211.** Norton, H. E., and P. A. Dirmeyer, 2018: Parameterizing karst for implementation in land surface models: A research-to-operations framework. American Geophysical Union Fall Meeting, Washington, DC, USA, H11B-05.
- C210.** Wu, J., and P. A. Dirmeyer, 2018: Drought demise quantification and attribution using the Community Earth System Model Large Ensemble (CESM-LE) and Modern-Era Retrospective Analysis for Research and Applications version 2 (MERRA2). American Geophysical Union Fall Meeting, Washington, DC, USA, H51G-1384.

- C209.** Chen, L., and P. A. Dirmeyer, 2018: Reconciling the disagreement between observed and simulated temperature responses to deforestation. American Geophysical Union Fall Meeting, Washington, DC, USA, GC14B-06.
- C208.** Mariotti, A., E. A. Barnes, E. K. M. Change, A. A. L. Lang, P. A. Dirmeyer, K. Pegion, and D. Barrie, 2018: Bridging the weather-to-climate prediction gap: Progress by the NOAA S2S Prediction Task Force. American Geophysical Union Fall Meeting, Washington, DC, USA, A41L-3150.
- C207.** Ford, T., and P. A. Dirmeyer, 2018: Land-atmosphere interactions and subseasonal heat wave forecasts from a suite of climate forecast models. American Geophysical Union Fall Meeting, Washington, DC, USA, A33E-04.
- C206.** Shin, C.-S., B. Huang, P. A. Dirmeyer, and A. Kumar, 2018: H44D-04 Sensitivity of US drought prediction skill to land initial states on subseasonal to seasonal timescales. American Geophysical Union Fall Meeting, Washington, DC, USA, H44D-04.
- C205.** Shukla, R. P., B. Huang, P. A. Dirmeyer, J. L. Kinter III, C.-S. Shin, and L. Marx, 2018: The Climatological Influence of Eurasian winter surface conditions on the summer circulation in the Asian continent and Indo-Pacific in the CFSv2 seasonal reforecasts. American Geophysical Union Fall Meeting, Washington, DC, USA, A23J-3024.
- C204.** Huang, B., C.-S. Shin, P. Dirmeyer and A. Kumar, 2018: Evaluating predictive skill and predictability of the US seasonal precipitation using CFSv2 reforecasts of sixty years (1958-2017). American Geophysical Union Fall Meeting, Washington, DC, USA, H51G-1383.
- C203.** Dirmeyer, P. A., 2018: Indications of surface and sub-surface hydrologic properties from SMAP. 5th Satellite Soil Moisture Validation and Application Workshop, Fairfax, VA, USA. 5-01.
- C202.** Dirmeyer, P. A., 2018: The land surface "sweet spot" between weather and climate (keynote). International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA, AS-01.
- C201.** Ford, T., and P. A. Dirmeyer, 2018: Seamless transition from weather to climate – A method for forecast definition and validation. International Conferences on Subseasonal to Decadal Prediction, Boulder, CO, USA, P-A3-06.
- C200.** Dirmeyer, P. A., 2018: Land surface models coupled to atmospheric models: Judging them as dance partners. Robert Dickinson Symposium on Earth System Modeling: Past, Present and Future, Austin, TX, USA.
- C199.** Dirmeyer, P. A., 2018: Confronting forecast models, reanalyses and land surface models with global remote sensing estimates of land-atmosphere coupling (invited). 8th GEWEX Open Science Conference, Canmore, AB, Canada.
- C198.** Wu, J., and P. A. Dirmeyer, 2018: A new framework for determining causes of drought demise over CONUS. 8th GEWEX Open Science Conference, Canmore, AB, Canada.
- C197.** Chen, L., and P. A. Dirmeyer, 2018: Observed and Simulated Impacts of Global Irrigation on Local Surface Temperature. 8th GEWEX Open Science Conference, Canmore, AB, Canada.
- C196.** Dirmeyer, P. A., 2018: Land-atmosphere interactions are a coupled model development problem. 2018 - US Climate Modeling Summit; Land-Atmosphere Interactions and Extremes Workshop, College Park, MD, USA.
- C195.** Dirmeyer, P. A. and S. Halder, 2017: On the harvest of predictability from land surface states. American Geophysical Union Fall Meeting, New Orleans, LA, USA, H42B-04.
- C194.** Chen, L. and P. A. Dirmeyer, 2017: Observed Local Impacts of Global Irrigation on Surface Temperature. American Geophysical Union Fall Meeting, New Orleans, LA, USA, A51C-2073.
- C193.** Ford, T., P. A. Dirmeyer and D. O. Benson, 2017: Evaluation of heat wave forecasts seamlessly across s2s time scales: skill attribution and the role of land-atmosphere interactions. American Geophysical Union Fall Meeting, New Orleans, LA, USA, A23M-01.
- C192.** Norton, H. E., P. A. Dirmeyer, M. B. Ek, H. Wei and Y. Xia, 2017: Parameterizing subsurface karst geology within the Noah Land Surface Model (LSM). American Geophysical Union Fall Meeting, New Orleans, LA, USA, H43N-08.
- C191.** Kumar, S., I. Suhr, P. A. Dirmeyer, and C. D. Peters-Lidard, 2017: Evaluating and improving the information content of satellite soil moisture measurements. American Meteorological Society 31st Conference on Hydrology, Seattle, WA, USA, 5.3.

- C190.** Tawfik, A. B., D. M. Lawrence and P. A. Dirmeyer, 2017: Dynamic scale awareness: Switching parameterized convection on at the right time. American Meteorological Society 29th Conference on Climate Variability and Change, Seattle, WA, USA, 4A.4.
- C189.** Dirmeyer, P. A., L. Chen and J. Wu, 2016: Extending the confrontation of weather and climate models from soil moisture to surface flux data. American Geophysical Union Fall Meeting, San Francisco, CA, USA, NG13A-1692.
- C188.** Chen, L. and P. A. Dirmeyer, 2016: Impacts of land use/land cover change on afternoon precipitation over North America. American Geophysical Union Fall Meeting, San Francisco, CA, USA, GC21B-1081.
- C187.** Ford, T., P. A. Dirmeyer, and D. Benson, 2016: Evaluation of the ability of S2S and NMME models to predict heat waves following drought events in the United States. American Geophysical Union Fall Meeting, San Francisco, CA, USA, A43O-06.
- C186.** Guo, Z. and P. A. Dirmeyer, 2016: Subseasonal predictability of extreme events. American Geophysical Union Fall Meeting, San Francisco, CA, USA, A33J-0411.
- C185.** Huang, B., C.-S. Shin, J. Shukla, L. Marx, M. Balmaseda, S. Halder, P. A. Dirmeyer, and J. L. Kinter 2016: Reforecasting the ENSO events in the past fifty-seven years (1958-2014). American Geophysical Union Fall Meeting, San Francisco, CA, USA, A43D-0262.
- C184.** Sobocinski-Norton, H. E. and P. A. Dirmeyer, 2016: Soil moisture memory in karst and non-karst landscapes. American Geophysical Union Fall Meeting, San Francisco, CA, USA, H31I-02.
- C183.** Wu, J. and P. A. Dirmeyer, 2016: Understanding the causes of drought demise over CONUS. American Geophysical Union Fall Meeting, San Francisco, CA, USA, H21D-1434.
- C182.** Dirmeyer, P. A., T. Ford and D. Benson 2016: Predictability of heat waves following drought events in the United States in S2S models (invited). Workshop on Sub-Seasonal to Seasonal Predictability of Extreme Weather and Climate, Lamont-Doherty Earth Observatory, Palisades, New York, USA.
- C181.** Hoyos, I., F. Dominguez, J. E. Cañon-Barriga, R. Nieto, A. Martinez, P. A. Dirmeyer, and L. Gimeno, 2016: Moisture origin and transport processes in Colombia, northern South America. 8th EGU Leonardo Conference, Ourense, Spain.
- C180.** Dirmeyer, P. A., J. Wei and A. Badger, 2016: Connections between oceans and continents via the atmospheric water cycle. CLIVAR Open Science Conference, Qingdao, China, 1.3-1.
- C179.** Dirmeyer, P. A., S. Halder and A. Badger, 2016: Teleconnections from land surface anomalies affect SSTs: Two distinct examples. CLIVAR Open Science Conference, Qingdao, China, Wed-151.
- C178.** Heidari, A., and P. A. Dirmeyer, 2016: Confronting Climate Model with satellite data. 3rd Satellite Soil Moisture Validation and Application Workshop, New York, New York, USA.
- C177.** Dirmeyer, P. A. and S. Halder, 2016: Role of land surface states in simulation and prediction of monsoons in CFSv2 (invited). Workshop on "Grand challenges in monsoon modeling: Representation of processes in climate models", International Centre for Theoretical Physics, Trieste, Italy.
- C176.** Dirmeyer, P. A., and L. Chen, 2016: Judging the Dance Contest – Metrics of Land–Atmosphere Feedbacks. 2016 International Land Model Benchmarking (ILAMB) Workshop, Washington, DC, USA.
- C175.** Dirmeyer, P. A., and M. B. Ek 2016: Modeling Land-Surface – Atmosphere. Water Availability Grand Challenge for North America Workshop, Columbia, Maryland, USA.
- C174.** Chen, L., O. W. Frauenfeld, and P. A. Dirmeyer, 2016: Biogeophysical Impacts of Land Cover / Land Use Change on Climate. 2016 Annual Meeting of the Association of American Geographers, San Francisco, California, USA.
- C173.** Bombardi, R., L. Marx, C. S. Shin, A. Tawfik, E. K. Schneider, P. A. Dirmeyer, and J. L. Kinter, 2016: The Heated Condensation Framework as a convective trigger in the NCEP Climate Forecast System version 2. American Meteorological Society 6th Conference on Transition of Research to Operations, New Orleans, Louisiana, USA, 3-3.
- C172.** Halder, S., P. A. Dirmeyer, L. Marx, and J. L. Kinter III, 2016: J17.3 Impact of land surface initialization on seasonal forecasts of the extremes of Indian summer monsoon. American Meteorological Society 30th Conference Hydrology, New Orleans, Louisiana, USA, J17.3.

- C171.** Kumar, S., R. P. Allan, P. A. Dirmeyer, D. M. Lawrence, and F. W. Zwiers, 2016: Revisiting trends in wetness and dryness in the presence of internal climate variability. American Meteorological Society 28th Conference on Climate Variability and Change, New Orleans, Louisiana, USA, 12C.2.
- C170.** Guo, Z., and P. A. Dirmeyer, 2016: Impacts of soil moisture initialization and memory on subseasonal forecast skill over North America. American Meteorological Society 30th Conference Hydrology, New Orleans, Louisiana, USA, 576.
- C169.** Guo, Z., and P. A. Dirmeyer, 2016: Subseasonal to Seasonal Forecast Skill of North American Precipitation and Surface Air Temperature. American Meteorological Society 28th Conference on Climate Variability and Change, New Orleans, Louisiana, USA, 619.
- C168.** Dirmeyer, P. A., 2015: Metrics as Tools for Assessing Land-Climate Feedback in Observations and Models (Invited). American Geophysical Union Fall Meeting, San Francisco, CA, USA, GC24B-01.
- C167.** Dirmeyer, P. A., 2015: The Land Surface as a Source of Predictability on Sub-Seasonal Time Scales (Invited). American Geophysical Union Fall Meeting, San Francisco, CA, USA, A43K-05.
- C166.** Halder, S., P. Dirmeyer, B. Cash and J. Adams, 2015: Potential Regions of Strong Land-atmosphere Coupling Based on the S2S Project Database: Implications for the Indian Summer Monsoon Rainfall Variability. American Geophysical Union Fall Meeting, San Francisco, CA, USA, A33M-0405.
- C165.** Tawfik, A., P. Dirmeyer, and D. Lawrence, 2015: Observed Local Soil Moisture-Atmosphere Feedbacks within the Context of Remote SST Anomalies: Lessons From Recent Droughts. American Geophysical Union Fall Meeting, San Francisco, CA, USA, H33J-06.
- C164.** Kumar, S., F. Zwiers, P. Dirmeyer, D. Lawrence, R. Shrestha and A. Werner, 2015: Robust and Heterogeneous Hydrological Changes under Global Warming. American Geophysical Union Fall Meeting, San Francisco, CA, USA, GC53B-1199.
- C163.** Halder, S., and P. A. Dirmeyer, 2015: Relation of Eurasian snow cover and Indian monsoon rainfall: Delayed hydrological effect. 40th Climate Diagnostics and Prediction Workshop, Denver, Colorado, USA.
- C162.** Dirmeyer, P. A., 2015: GSWP-1 & -2: Lessons learned. Land Modelling "LandMIP" Workshop, ETH Zurich, Zurich, Switzerland.
- C161.** Dirmeyer, P. A., 2015: GLACE 1&2 Overview. Land Modelling "LandMIP" Workshop, ETH Zurich, Zurich, Switzerland.
- C160.** Dirmeyer, P. A., 2015: Water Cycle Linkages Between the Intra-American Seas and Continental Areas. Observing and Modeling Climate Variability in the Intra-American Seas and Impacts on the Continental Americas and the Caribbean, Virtual Conference.
- C159.** Dirmeyer, P. A., 2015: Stranger in a Strange Land Model. Shukla Symposium, Bethesda, Maryland, USA.
- C158.** Dirmeyer, P. A., A. Tawfik, S. Halder, H. Norton, J. Wu, M. G. Bosilovich, J. A. Santanello Jr., and M. B. Ek, 2015: Confronting global land-atmosphere models with coupled process metrics. American Meteorological Society, 29th Conference on Hydrology, Phoenix, Arizona, USA, J1.2.
- C157.** Halder, S., P. A. Dirmeyer, L. Marx, and J. L. Kinter III, 2015: Predictability of the South Asian monsoon in the CFSv2 Operational Forecast Model. American Meteorological Society, Special Symposium on the South Asia Monsoon, Phoenix, Arizona, USA, 878.
- C156.** Shrestha, R. K., J. Meng, P. Xie, P. A. Dirmeyer, M. B. Ek, and K. Mo, 2015: Evaluation of OLR-based CPC high-resolution precipitation in GLDAS re-run experiment. American Meteorological Society, 29th Conference on Hydrology, Phoenix, Arizona, USA, 511.
- C155.** Tawfik, A. B., and P. A. Dirmeyer, 2015: A New Explicit and Computationally Efficient Sub-grid Convective Initiation Scheme. American Meteorological Society, 27th Conference on Climate Variability and Change, Phoenix, Arizona, USA, 12A.2.
- C154.** Kinter, J. L. III, P. A. Dirmeyer, B. Huang, E. K. Schneider, R. Bombardi, S. Halder, C. S. Shin, R. Shukla, and B. Singh, 2015: Promises and Prospects for Predicting the South Asian Monsoon. American Meteorological Society, Special Symposium on the South Asia Monsoon, Phoenix, Arizona, USA, 3.4.
- C153.** Tawfik, A. B., and P. A. Dirmeyer, 2014: Evolution of Soil Moisture-Convection Interactions against the Backdrop of Global Oscillations. American Geophysical Union Fall Meeting, San Francisco, CA, USA, H11J-05.

- C152.** Dirmeyer, P. A., Z. Guo, S. Halder, H. Norton, and J. Wu, 2014: An initial assessment of coupled land-atmosphere memory in (and beyond) reanalysis. 39th Climate Diagnostics and Prediction Workshop, St. Louis, Missouri, USA.
- C151.** Dirmeyer, P. A., A. Tawfik, H. Norton, and J. Wu, 2014: Land-atmosphere feedbacks over North America: How well do weather and climate models represent reality? World Weather Open Sci. Conf. (WWOSC), Montréal, Canada, SCI-PS101.02.
- C150.** Guo, Z. and P. A. Dirmeyer, 2014: Impact of land surface on subseasonal forecasting skill: Inter-model comparison. WWOSC, Montréal, Canada, SCI-PS113.02.
- C149.** Meng, J., Y. Xia, J. Dong, P. Dirmeyer, M. Ek, R. Shrestha, Preliminary investigations on high resolution land data assimilation over CONUS region. WWOSC, Montréal, Canada, SCI-POW1049.
- C148.** Dirmeyer, P. A., L. Yu, S. Amini, A. Crowell, A. Elders, and J. Wu, 2014: Projected transitions from recent climate in the surface water cycle and land-atmosphere coupling, 7th Intl. GEWEX Sci. Conf., The Hague, The Netherlands.
- C147.** Shrestha, R., H. Wei, J. Dong, P. A. Dirmeyer, and M. B. Ek, 2014: Introducing an automated Gap-Filling method to use CEOP data in land surface model evaluation and benchmarking experiment. 7th Intl. GEWEX Sci. Conf., The Hague, The Netherlands.
- C146.** Tawfik, A., and P. A. Dirmeyer, 2014: Rethinking convective triggering in CESM. Community Earth System Modeling Workshop, Breckenridge, Colorado, USA.
- C145.** Dirmeyer, P. A., and A. Tawfik, 2014: Validation of CFSv2 model behavior – Land-atmosphere interactions and the hydrologic cycle. NOAA Climate Prediction Science and Technology Digest, Feb 2014, 75-79.
- C144.** Dirmeyer, P. A., 2014: Does the NOAA global model take full benefit of land state information for subseasonal forecasts? WMO WWRP/THORPEX-WCRP International Conference on Subseasonal to Seasonal Prediction, College Park, Maryland, USA.
- C143.** Xu, Li, and P. A. Dirmeyer, 2014: Snow atmosphere coupling and its associate predictability. WMO WWRP/THORPEX-WCRP International Conference on Subseasonal to Seasonal Prediction, College Park, Maryland, USA.
- C142.** Best, M., G. Abramowitz, H. Johnson, M. Ek, P. A. Dirmeyer, Z. Guo, B. Pak, L. Stevens, M. Decker, G. Balsamo, B. J. J. M. van den Hurk, J. A. Santanello Jr., C. D. Peters-Lidard, S. Kumar, A. J. Pitman, A. A. Boone, H. Kim, and T. Oki, 2014: Results from the international benchmarking project, PLUMBER (PALS Land sUrface Model Benchmarking Evaluation pRoject) (Invited), American Meteorological Society, 28th Conference on Hydrology, J10.2.
- C141.** Kumar, S., J. L. Kinter III, P. A. Dirmeyer, and D. M. Lawrence, 2014: Climate Processes in CMIP5: The “warming hole” simulations in CMIP5 models—role of natural climate variability versus anthropogenic effects, American Meteorological Society, 26th Conference on Climate Variability and Change, 2A.4.
- C140.** Shrestha, R. K., H. Wei, J. Dong, P. A. Dirmeyer, and M. B. Ek, 2014: Sensitivity of albedo and greenness fraction parameters in surface fluxes estimated from Noah land surface models in the FLUXNET sites. American Meteorological Society, 28th Conference on Hydrology, 49.
- C139.** Tawfik, A. B., and P. A. Dirmeyer, 2014: Isolating the Impact of Local and Large-Scale Forcings on Surface Triggered Convection. American Meteorological Society, 28th Conference on Hydrology, J1.1.
- C138.** Dirmeyer, P. A., 2013: Land Surface Processes and Drought Forecast Skill over North America (Invited). American Geophysical Union Fall Meeting, San Francisco, CA, USA, H12B-06.
- C137.** Badger, A. M., and P. A. Dirmeyer, 2013: Modification of Atmospheric Circulations and Transports due to Amazon Deforestation. American Geophysical Union Fall Meeting, San Francisco, CA, USA, GC43A-1036.
- C136.** Oki, T., H. Kim, C. R. Ferguson, P. A. Dirmeyer, and S. I. Seneviratne, 2013: Global water balances reconstructed by multi-model offline simulations of land surface models under GSWP3 (Invited) American Geophysical Union Fall Meeting, San Francisco, CA, USA, H53J-01.
- C135.** Shrestha, R. K., J. Dong, P. A. Dirmeyer, M. B. Ek, and G. Abramowitz, 2013: Evaluation of Noah land surface models in the FLUXNET sites using the Land Information System. American Geophysical Union Fall Meeting, San Francisco, CA, USA, H32G-07.

- C134.** Tawfik, A. B., and P. A. Dirmeyer, 2013: Separating the Impact of Local and Large-scale Forcings on Soil Moisture-Precipitation Coupling. American Geophysical Union Fall Meeting, San Francisco, CA, USA, H11L-02.
- C133.** Dirmeyer, P. A. and A. Tawfik, 2013: Validation of CFSv2 model behavior – land-atmosphere interactions and the hydrologic cycle. 38th Climate Diagnostics and Prediction Workshop, College Park, Maryland, USA.
- C132.** Tawfik, A. and P. A. Dirmeyer, 2013: A process-based framework for isolating large-scale and surface forcing during convection. 38th Climate Diagnostics and Prediction Workshop, College Park, Maryland, USA.
- C131.** Dirmeyer, P. A., Y. Jin, B. Singh, and X. Yan, 2013: Determining land-atmosphere coupling trends in a changing climate from multi-model ensembles. American Meteorological Society, 25th Conference on Climate Variability and Change, TJ15.2.
- C130.** Dirmeyer, P. A., J. Wei, M. Bosilovich, 2013: Comparing evaporative sources using relative entropy – a tool to diagnose the origins of droughts. American Meteorological Society, 27th Conf. on Hydrology, TJ3.4.
- C129.** Best, M., G. Abramowitz, G. Balsamo, E. Blyth, A. A. Boone, P. A. Dirmeyer, M. B. Ek, R. D. Koster, S. V. Kumar, T. Oki, C. D. Peters-Lidard, A. Pitman, J. Polcher, J. A. Santanello Jr., B. J. J. M. van den Hurk, and P. Viterbo, 2013: Benchmarking: An International Model Comparison. American Meteorological Society, 27th Conf. on Hydrology, 4B.1.
- C128.** Wei, J., and P. A. Dirmeyer, 2013: Dissecting soil moisture-precipitation coupling. American Meteorological Society, 27th Conf. on Hydrology, 4B.6.
- C127.** Wei, J., P. A. Dirmeyer, D. Wisser, M. Bosilovich, and D. M. Mocko, 2013: Where does the irrigation water go? An estimate of the contribution of irrigation to precipitation using MERRA. American Meteorological Society, 27th Conf. on Hydrology, J2.4.
- C126.** Kumar, S., J. L. Kinter III and P. Dirmeyer, 2013: Role of natural climate variability in regional climate change and its application to water resources. World Environmental & Water Resources Congress, Cincinnati, Ohio, USA, #1196.
- C125.** Kumar, S., P. A. Dirmeyer, and D. M. Lawrence, 2012: Twenty-first century challenges in water resources – A land-atmosphere interaction perspective. American Geophysical Union Fall Meeting, San Francisco, CA, GC41A-0954.
- C124.** Dirmeyer, P. A., Y. Jin, B. Singh, and X. Yan, 2012: Land-atmosphere coupling trends in a changing climate. 1st GEWEX Pan-Global Atmospheric System Study (GASS) Conference, Boulder, Colorado, USA, PM41.
- C123.** Kumar, S., P. A. Dirmeyer, Z. Guo, T. DelSole, J. L. Kinter III, B. A. Cash, M. J. Fennessy, E. L. Altshuler, and D. M. Straus, 2012: Sub-seasonal to seasonal climate predictability in a changing climate: effects of land cover change. 1st GEWEX Pan-Global Atmospheric System Study (GASS) Conference, Boulder, Colorado, USA, PM37.
- C122.** Dirmeyer, P. A., 2012: Water Cycle and Land-Atmosphere Coupling. CFSv2 Evaluation Workshop, Riverdale, Maryland, USA.
- C121.** Dirmeyer, P. A., J. Wei, M. G. Bosilovich, and D. M. Mocko, 2012: A water cycle perspective on the connection between precipitation extremes and circulation anomalies. 4th WCRP International Conference on Reanalyses, Silver Spring, Maryland, USA.
- C120.** Wei, J., P. A. Dirmeyer, M. G. Bosilovich, and D. M. Mocko, 2012: Where does the irrigation water go? An estimate of the contribution of irrigation to precipitation using MERRA. 4th WCRP International Conference on Reanalyses, Silver Spring, Maryland, USA.
- C119.** Mocko, D. M., M. G. Bosilovich, A. da Silva, P. A. Dirmeyer, and J. Wei, 2012: Water vapor tracers in MERRA replay mode using the NASA/GSFC GEOS-5 GCM. 4th WCRP International Conference on Reanalyses, Silver Spring, Maryland, USA.
- C118.** Dirmeyer, P. A., 2011: A global perspective on local land-atmosphere coupling – present and future. (invited) American Geophysical Union Fall Meeting, San Francisco, CA, H24E-01.
- C117.** Dirmeyer, P. A., B. A. Cash, J. L. Kinter III, T. Jung, L. Marx, P. Towers, N. Wedi, D. Achuthavarier, J. M. Adams, E. L. Altshuler, B. Huang, E. K. Jin, and J. Manganello, 2011: Precipitation extremes in a changing climate – results from high-resolution climate simulations. WCRP Open Science Conference, Denver, Colorado, USA, C39-TH159B.
- C116.** Dirmeyer, P. A., D. Straus, J. L. Kinter III, M. J. Fennessy, B. A. Cash, T. DelSole, E. L. Altshuler, D. A. Paolino, Z. Guo, B. Huang, and J. Shukla, 2011: Predictability in a changing climate – comparison of intraseasonal to

- seasonal forecasts in a pre-industrial versus modern background climate. WCRP Open Science Conference, Denver, Colorado, USA, C25-W75A.
- C115.** Dirmeyer, P. A., J. Wei and M. G. Bosilovich, 2011: Critical sources of evaporated moisture for terrestrial precipitation. WCRP Open Science Conference, Denver, Colorado, USA, C10-M23B.
- C114.** Dirmeyer, P. A., J. Wei, Z. Guo, and L. Zhang, 2011: Investigation of land-atmosphere interaction with a multi-model coupling approach. WCRP Open Science Conference, Denver, Colorado, USA, C10-M30A.
- C113.** Guo, Z., P. A. Dirmeyer and T. DelSole, 2011: Relative contribution of sea surface temperature and soil moisture to subseasonal atmospheric predictability. WCRP Open Science Conference, Denver, Colorado, USA, C25-W72A.
- C112.** Kumar, S., V. Merwade, and P. A. Dirmeyer, 2011: Evaluation of hydroclimatic variables from IPCC-AR5 climate models using observation, reanalysis, and land data assimilation system. WCRP Open Science Conference, Denver, Colorado, USA, C34-W177B.
- C111.** Seneviratne, S. I., C. Jimenez, B. Mueller, C. Kummerow, M. McCabe, W. B. Rossow, G. Balsamo, P. Ciais, P. A. Dirmeyer, H. Dolman, J. B. Fisher, F. Ludwig, C. Prigent, R. H. Reichle, M. Reichstein, M. Rodell, B. Su, K. Wang, and E. F. Wood, 2011: The LandFlux-EVAL initiative. 3rd iLEAPS Science Conference, Garmisch-Partenkirchen, Germany.
- C110.** Dirmeyer, P. A., B. A. Cash, J. L. Kinter III, T. Jung, L. Marx, P. Towers, N. Wedi, D. Achuthavari, J. M. Adams, E. L. Altshuler, B. Huang, E. K. Jin, and J. Manganello, 2011: Evidence for enhanced land-atmosphere feedback in a warming climate. WCRP Workshop on Drought Predictability and Prediction in a Changing Climate, 2-4 March 2011, Barcelona, Spain.
- C109.** Dirmeyer, P. A., 2010: A Life Story of the Global Soil Wetness Project. Second International Conference of Hydrology delivers Earth System Science to Society, Tokyo, Japan.
- C108.** Guo, Z., and P. A. Dirmeyer, 2010: Land surface impacts on subseasonal predictability and forecast skill. Second International Conference of Hydrology delivers Earth System Science to Society, Tokyo, Japan.
- C107.** Mueller, B., S. I. Seneviratne, C. Jimenez, T. Corti, W. Dorigo, M. Hirschi, G. Balsamo, P. Ciais, P. Dirmeyer, J. B. Fisher, M. Jung, C. D. Kummerow, F. Maignan, M. F. McCabe, R. Reichle, M. Reichstein, M. Rodell, W. B. Rossow, J. Sheffield, A. J. Teuling, K. Wang, and E. F. Wood, 2010: Evaluation of global evapotranspiration datasets: The LandFlux-Eval project. The Fourth International Workshop on Catchment-scale Hydrological Modeling and Data Assimilation (CAHMDA IV), Lhasa, China.
- C106.** Zhou, L., R. E. Dickinson, A. Dai, and P. Dirmeyer, 2009: Detection and Attribution of Anthropogenic Forcing to Diurnal Temperature Range Changes from 1950 to 1999: Comparing Multi-Model Simulations with Observations. American Geophysical Union Fall Meeting, H41G-0989.
- C105.** Dirmeyer, P. A. (INVITED), Z. Guo, R. Koster, K. Brubaker, and C. A. Schlosser, 2009: Building the case for (or against) land-driven climate predictability. Water in a Changing Climate: Progress in Land-Atmosphere Interactions and Energy/Water Cycle Research Parallel GEWEX and iLEAPS Science Conferences, Melbourne, Australia.
- C104.** Dirmeyer, P. A., and J. L. Kinter III, 2009: The Maya Express – Linking tropical moisture to mid-latitude flooding over North America. 6th International Scientific Conference on the Global Energy and Water Cycle, Melbourne, Australia
- C103.** DelSole, T., P. A. Dirmeyer, and M. Zhao, 2009: Diagnosis of land-atmosphere dynamics and the atmospheric water cycle through model empirical correction. Water in a Changing Climate: Progress in Land-Atmosphere Interactions and Energy/Water Cycle Research Parallel GEWEX and iLEAPS Science Conferences, Melbourne, Australia. JA-9.
- C102.** Koster, R. D., Z. Guo and P. A. Dirmeyer, 2008: Robustness of agricultural drought indices derived from land surface model integrations. American Meteorological Society, 22st Conf. on Hydrology, 5.1.
- C101.** Dirmeyer, P. A., and K. L. Brubaker, 2007: Atmospheric transfer of surface water between basins and between nations. American Meteorological Society, 21st Conf. on Hydrology, J2.2.
- C100.** Dirmeyer, P. A., and C. A. Schlosser, 2007: The connection between precipitation recycling and land surface memory. American Meteorological Society, 21st Conf. on Hydrology, 6A.8.

- C99.** Zhao, M., T. M. DelSole, P. Dirmeyer, and B. Kirtman 2007: Systematic errors effect on seasonal predictive skill. American Meteorological Society, 16th Conf. on Applied Climatology, 4.3.
- C98.** Gao, X., and P. Dirmeyer, 2006: Sensitivity of land surface simulations to the treatment of vegetation properties and implications for seasonal climate prediction. 36th COSPAR Scientific Assembly, Beijing, China. Abstract #1816.
- C97.** Dirmeyer, P. A., and K. L. Brubaker, 2006: Sources, sinks and trends in the water cycle from a back-trajectory analysis of atmospheric water vapor. American Geophysical Union Spring Meeting, A22A-03.
- C96.** Schlosser, C. A., and P. A. Dirmeyer, 2006: Evaluating Land Memory from the Global Soil Wetness Project Phase 2 Simulations: A North American Perspective. American Geophysical Union Spring Meeting, A22A-05.
- C95.** Guo, Z., and P. A. Dirmeyer, 2006: Evaluation of GSWP-2 Soil Moisture Simulations and its Implication for Seasonal Prediction. American Geophysical Union Spring Meeting, A33D-03.
- C94.** Dirmeyer, P. A., Z. Guo, and R. D. Koster, 2006: (INVITED) Do global models properly represent the feedback between land and atmosphere?. American Meteorological Society, Joint 18th Conf. on Climate Var. and Change and 20th Conf. on Hydrology, J5.9.
- C93.** Gao, X., P. A. Dirmeyer, Z. Guo and M. Zhao, 2006: Sensitivity of land surface simulations to the distribution and treatment of vegetation properties in GSWP-2. American Meteorological Society, Joint 20th Conf. on Hydrology, 1.9.
- C92.** Guo, Z., and P. A. Dirmeyer, 2006: A global analysis of variability and trends of soil moisture. American Meteorological Society, 18th Conf. on Climate Var. and Change, J5.13.
- C91.** Guo, Z., P. A. Dirmeyer, and R. D. Koster, 2006: The role of land surface schemes on land-atmosphere coupling strength in weather and climate models. American Meteorological Society, Joint 18th Conf. on Climate Var. and Change and 20th Conf. on Hydrology, JP1.34.
- C90.** Schlosser, C. A., P. A. Dirmeyer, and K. L. Brubaker, 2006: Assessing land memory in the GSWP2 simulations and association to global recycling estimates. American Meteorological Society, Joint 18th Conf. on Climate Var. and Change and 20th Conf. on Hydrology, J1.10.
- C89.** Dirmeyer, P. A., X. Gao, M. Zhao, Z. Guo, T. Oki, N. Hanasaki, and J. Dunn, 2005: The Second Global Soil Wetness Project (GSWP-2) Multi-Model Analysis. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 113.
- C88.** Dirmeyer, P., Z. Guo, R. Koster, 2005: Do Current Weather and Climate Models Represent Land-Atmosphere Coupling Correctly? Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 178.
- C87.** Dirmeyer, P., and K. Brubaker, 2005: Global Characterization of Recycling and Evaporative Moisture Sources from a Quasi-Isentropic Back-Trajectory Analysis of Atmospheric Water Vapor. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 214.
- C86.** Guo, Z., P. A. Dirmeyer, X. Gao, M. Zhao, 2005: Improving the Quality of Simulated Soil Moisture with a Multi-Model Ensemble Approach. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 117.
- C85.** Koster R., Z. Guo, and P. Dirmeyer, 2005: GLACE: The Global Land-Atmosphere Coupling Experiment. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 187.
- C84.** Oki, T., N. Hanasaki, Y. Shen, S. Kanae, K. Masuda, P. A. Dirmeyer, 2005: Multi-Land Surface Model Analysis of Global Water Balance and Hydrological Cycles by the 2nd Phase of the Global Soil Wetness Project. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 144.
- C83.** Peters-Lidard, C., S.V. Kumar, Y. Tian, J. Geiger, M. Garcia, M. Rodell, P. R. Houser, E. F. Wood, J. Sheffeld, K. Mitchell, J. Meng, P. Dirmeyer, B. Doty, J. Adams, 2005: The Production and Value of High Resolution Land Surface Data Assimilation Products from the NASA/GSFC Land Information System. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 146.
- C82.** Polcher, J., P. A. Dirmeyer, A. A. M. Holtslag, and C. Jakob, 2005: Improving the representation of water cycle processes in models. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 197.
- C81.** Schlosser, C. A., P. R. Houser, and P. A. Dirmeyer, 2005: GEWEX Contributions to a Satellite-Era Perspective of the Global Water Cycle. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 238.
- C80.** Seneviratne, S. I., R. D. Koster, Z. Guo, P. A. Dirmeyer, E. Kowalczyk, D. Lawrence, P. Liu, C.-H. Lu, D. Mocko, K. W. Oleson, and D. Verseghy, 2005: Soil Moisture Memory in AGCM Simulations: Analysis of Global Land-

- Atmosphere Coupling Experiment (GLACE) Data. Proc. 5th Int'l Scientific Conf. on the Global Energy and Water Cycle, p. 199.
- C79.** Dirmeyer, P. A., T. DelSole, 2005: Examination of the Hydrologic Feedback Pathway for Land-Climate Coupling. American Meteorological Society, Symp. on Glob. Change and Climate Variations, 2.6.
- C78.** Dirmeyer, P. A., and X. Gao, 2005: Transition of the Second Global Soil Wetness Project (GSWP-2) from Modeling Phase to Analysis Phase. American Meteorological Society, 19th Conf. on Hydrology, 6.1.
- C77.** Dirmeyer, P. A., 2005: The GEWEX Global Land Atmosphere System Study (GLASS) – Recent Results and Future Plans. American Meteorological Society, 19th Conf. on Hydrology, J6.7.
- C76.** Guo, Z., P. A. Dirmeyer and R. Koster, 2005: The Global Land-Atmosphere Coupling Experiment (GLACE): Model characteristics and comparison. American Meteorological Society, 19th Conf. on Hydrology, J4.3.
- C75.** Guo, Z., P. Dirmeyer, X. Gao, and M. Zhao, 2005: The sensitivity of soil moisture to external forcing in SSiB land surface scheme. American Meteorological Society, 19th Conf. on Hydrology, J6.10.
- C74.** Zhao, M., and P. A. Dirmeyer, 2005: Seasonal predictability and the land/air interaction. American Meteorological Society, 19th Conf. on Hydrology, 2.10.
- C73.** Gao, X., and P. A. Dirmeyer, 2005: Multi-model analysis and validation in GSWP-2. American Meteorological Society, 19th Conf. on Hydrology, 6.4.
- C72.** Schlosser, C. A., and P. A. Dirmeyer, 2005: The GSWP2 baseline simulations: summary evaluation. American Meteorological Society, 19th Conf. on Hydrology, 6.3.
- C71.** Oki, T., N. Hanasaki, Y. Shen, S. Kanae, K. Masuda, and P. A. Dirmeyer, 2005: Global water balance estimated by land surface models participated in the GSWP2. American Meteorological Society, 19th Conf. on Hydrology, J6.5.
- C70.** Tian, Y., C. Peters-Lidard, S. V. Kumar, J. V. Geiger, S. Olden, L. Lighty, J. L. Eastman, P. R. Houser, J. Sheffield, E. F. Wood, K. E. Mitchell, J. Meng, H. Wei, P. Dirmeyer, B. Doty, and J. M. Adams, 2005: Building the GSFC Land Information System with distributed and parallel computing technologies. American Meteorological Society, 21st Int'l Conf. on Interactive Information Processing Systems (IIPS) for Meteorology, Oceanography, and Hydrology, JP1.3.
- C69.** Peters-Lidard, C. D., S. V. Kumar, M. Rodell, Y. Tian, J. V. Geiger, S. Olden, L. Lighty, J. L. Eastman, P. R. Houser, E. F. Wood, J. Sheffield, K. E. Mitchell, C. J. Meng, P. A. Dirmeyer, B. Doty, and J. Adams, 2005: Multiscale Evaluation of GLDAS Products for CEOP with the Land Information System. American Meteorological Society, 19th Conf. on Hydrology, J6.8.
- C68.** Houser, P., C. Peters-Lidard, S. Kumar, Y. Tian, J. Geiger, S. Olsen, L. Lighty, J. L. Eastman, J. Sheffield, E. F. Wood, K. Mitchell, H. Wei, G. Gayno, P. Dirmeyer, B. Doty and J. Adams, 2004: Global and Regional Ensemble Land-Atmosphere Modeling with the Land Information System. Eos Trans. AGU, 85(28), West. Pac. Geophys. Meet. Suppl., Abstract H21A-04.
- C67.** Tian, Y., C. Peters-Lidard, S. Kumar, J. Geiger, S. Olsen, L. Lighty, J. L. Eastman, Houser, P., J. Sheffield, E. F. Wood, K. Mitchell, H. Wei, G. Gayno, P. Dirmeyer, B. Doty and J. Adams, 2004: Advanced Computational Technologies in the GSFC Land Information System. NASA Earth Science Technology Conference, Palo Alto, CA.
- C66.** Dirmeyer, P. A., M. Zhao and J. Shukla, 2004: The contribution of land-atmosphere interaction to boreal summer season predictability. Proc. 1st International CLIVAR Science Conference, ST-38, 64.
- C65.** Fan, M., E.K. Schneider, and P. Dirmeyer, 2004: Impact of Amazon deforestation in a coupled general circulation model. Proc. 1st International CLIVAR Science Conference, ST-37, 64.
- C64.** Koster, R., Z. Guo and P. Dirmeyer, 2004: GLACE: Quantifying land-atmosphere coupling strength across a broad range of climate models. Proc. 1st International CLIVAR Science Conference, ST-36, 63.
- C63.** Dirmeyer, P. A., Z. Guo, and X. Gao, 2004: A comparison of several multi-year global soil wetness products. Geophys. Res. Abs., 6, European Geophys. Union General Assembly, EGU04-A-03328.
- C62.** Dirmeyer, P. A., M. Zhao and J. Shukla, 2004: The contribution of land-atmosphere interaction to boreal summer season predictability. American Meteorological Society, 18th Conf. on Hydrology, J3.1.
- C61.** Dirmeyer, P. A., and X. Gao, 2004: A progress report on the Second Global Soil Wetness Project (GSWP-2). American Meteorological Society, 18th Conf. on Hydrology, 1.1.

- C60.** Dirmeyer, P. A., Z. Guo and X. Gao, 2004: Validation and Forecast Applicability of Multi-Year Global Soil Wetness Products. American Meteorological Society, 15th Symp. on Glob. Change and Climate Variations, 7.4.
- C59.** Guo, Z., P. A. Dirmeyer and R. D. Koster, 2004: GLACE: An intercomparison of land-atmosphere coupling strength across a range of atmospheric general circulation models. American Meteorological Society, 18th Conf. on Hydrology, J3.10.
- C58.** Zhao, M. and P. Dirmeyer, 2004: Analysis and comparison of GSWP-2 input data sets. American Meteorological Society, 18th Conf. on Hydrology, 1.2.
- C57.** Gao, X., and P. A. Dirmeyer, 2004: Remote Sensing Validation of Land Surface Schemes on a Global Scale. American Meteorological Society, 18th Conf. on Hydrology, 1.7.
- C56.** Guo, Z., P. A. Dirmeyer, X. Gao, and M. Zhao, 2004: Spatial and temporal variability of global soil wetness. American Meteorological Society, 18th Conf. on Hydrology, 1.10.
- C55.** Schlosser, C. A., R. Koster and P. A. Dirmeyer, 2004: Land Memory in GSWP 2 and AMIP 2 Simulations. American Meteorological Society, 18th Conf. on Hydrology, JP4.34.
- C54.** Zhao, M., and P. A. Dirmeyer, 2004: Pattern and trend analysis of temperature in a set of seasonal ensemble simulations. American Meteorological Society, 15th Symp. on Glob. Change and Climate Variations, P1.12.
- C53.** Dirmeyer, P. A., M. Zhao, and C. A. Schlosser, 2003: Spring and Summer Seasonal Predictability and the Land Surface. American Meteorological Society, 14th Symp. on Glob. Change and Climate Variations, 5.1.
- C52.** Dirmeyer, P. A., and T. Oki, 2003: The Second GEWEX Global Soil Wetness Project (GSWP2). American Meteorological Society, 17th Conf. on Hydrology, JP4.2.
- C51.** Sudradjat, A., K. L. Brubaker, and P. A. Dirmeyer, 2003: Spatio-temporal source-sink analysis of precipitation supply in the Amazon River Basin. American Meteorological Society, 17th Conf. on Hydrology, 2.1.
- C50.** Dirmeyer, P. A., 2002: Dynamical seasonal climate predictability - the role of land surface memory. Amer. Geophys. Union, 2002 Spring Meeting, B42A-05.
- C49.** Dirmeyer, P. A., and T. Oki, 2002: Second GEWEX/GLASS Global Soil Wetness Project (GSWP2). Amer. Geophys. Union, 2002 Spring Meeting, B32A-09.
- C48.** Dirmeyer, P. A., and C. A. Schlosser, 2002: Dynamical seasonal climate predictability over the GAPP domain. Abs. Vol. Mississippi River Climate and Hydrology Conference, 33.
- C47.** Dirmeyer, P. A., and T. Oki, 2002: Second GEWEX/GLASS Global Soil Wetness Project (GSWP2). Abs. Vol. Mississippi River Climate and Hydrology Conference, 54.
- C46.** Dirmeyer, P. A., 2002: Three modes of climate drift in coupled land-atmosphere systems. Workshop on Prospects for Improved Forecasts of Weather and Short-Term Climate Variability on Subseasonal Time Scales, Mitchellville, Maryland, USA, 16-18 April 2002.
- C45.** Dirmeyer, P. A., J. Shukla, C. A. Schlosser, and L. Tan, 2001: Dynamical Seasonal Prediction including the effects of land surface anomalies. Proc. 12th Symp. on Glob. Change and Climate Variations, American Meteorological Society, 105-106.
- C44.** Dirmeyer, P. A., O. Reale, and C. A. Schlosser, 2001: Climate sensitivity to land surface variability from minutes to years. Proc. 12th Symp. on Glob. Change and Climate Variations, American Meteorological Society, 5.10.
- C43.** Brubaker, K. L., P. A. Dirmeyer, A. Sudradjat, and F. Bernal, 2001: Interannual variability of the sources of warm-season precipitation over the Mississippi Basin. Proc. 12th Symp. on Glob. Change and Climate Variations, American Meteorological Society, 3.12.
- C42.** Schlosser, C. A., J. Shukla, P. A. Dirmeyer, and L. Tan, 2001: The potential impact of proper land-surface representation on spring dynamical seasonal predictions. Proc. 12th Symp. on Glob. Change and Climate Variations, American Meteorological Society, 5.2.
- C41.** Dirmeyer, P. A., L. Tan, and C. A. Schlosser, 2000: Global evaluation of the Common Land Model (CLM) within the Global Soil Wetness Project (GSWP) framework. Amer. Geophys. Union, 2000 Spring Meeting, A42D-02.
- C40.** Fennessy, M. J., P. A. Dirmeyer, J. L. Kinter, A. Schlosser, J. Shukla, J. Huang, and L. Sun, 2000: Impact of initial soil wetness on seasonal atmospheric predictions over the U.S. during March-April-May 2000. Amer. Geophys. Union, 2000 Spring Meeting, A32D-04.

- C39.** Brubaker, K. L., A. Sudradjat, B. S. Levy, P. A. Dirmeyer, and F. Bernal, 2000: A 36-year climatology of the evaporative sources of warm-season precipitation in the Mississippi River Basin. Amer. Geophys. Union, 2000 Spring Meeting, A41A-07.
- C38.** Misra, V., P. A. Dirmeyer, and B. P. Kirtman, 2000: High resolution moisture budget over Amazon river basin during three contrasting years of the ENSO cycle. Amer. Geophys. Union, 2000 Spring Meeting, A41A-10.
- C37.** Sudradjat, A., P. A. Dirmeyer, K. L. Brubaker, and F. R. Bernal, 2000: Seasonal and interannual variabilities of atmospheric evaporative moisture source regions for the Mississippi basin. Amer. Geophys. Union, 2000 Spring Meeting, A32D-01.
- C36.** Reale, O., P. A. Dirmeyer and C. A. Schlosser, 2000: The importance of land surface variability to climate variability. Amer. Geophys. Union, 2000 Spring Meeting, A31D-10.
- C35.** Venugopal, V., and P. A. Dirmeyer, 2000: Integrating climate and hydrologic models: quantifying subgrid scale rainfall variability and its impact on regional assessments. Amer. Geophys. Union, 2000 Spring Meeting, H31D-09.
- C34.** Dirmeyer, P. A., K. L. Brubaker, A. Sudradjat, F. Bernal, and B. Levy, 2000: A climatology and analysis of evaporative sources of rainfall over the Mississippi Basin. Proc. 15th Conf. on Hydrology, American Meteorological Society, 87-90.
- C33.** Dirmeyer, P. A., 2000: Climate drift in the coupled land-atmosphere system. Proc. 11th Symp. on Global Change Studies, American Meteorological Society.
- C32.** Dirmeyer, P. A., 2000: The importance of land-surface variability to climate variability. Proc. 15th Conf. on Hydrology, American Meteorological Society.
- C31.** Schlosser, C. A., P. A. Dirmeyer, and L. Marx, 2000: Modeling issues of snow and land-ice in a general circulation model. Proc. 15th Conf. on Hydrology, American Meteorological Society.
- C30.** Venugopal, V., and P. A. Dirmeyer, 2000: Scale-invariance in space-time rainfall: Extension to climate scales. Proc. 15th Conf. on Hydrology, American Meteorological Society, 153-155.
- C29.** Xue, Y., H. H. Juang, P. A. Dirmeyer, S. Y. Hong, M. Kanamitsu, and Y. Sud, 2000: Sensitivity of GCM simulations to land-surface processes. Proc. 11th Symp. on Global Change Studies, American Meteorological Society.
- C28.** Hoff, H., R. Hutjes, and P. Dirmeyer, 1999: Land-surface data sets for hydrological and climate modelling. *IGBP Global Change Newsletter*, **39**, 18-21.
- C27.** Dirmeyer, P. A., K. L. Brubaker, F. Bernal, A. Sudradjat, and B. Levy, 1999: The evaporative sources of moisture supplying rainfall over the Mississippi basin. Proc. 2nd International Conference on Reanalyses, World Climate Research Programme WCRP-109, WMO/TD-NO. 985, 205-208.
- C26.** Dirmeyer, P. A., 1999: Impact of GSWP soil moisture and ISLSCP vegetation data sets on the simulation of seasonal climate. 14th Conf. on Hydrology, American Meteorological Society, 228-229.
- C25.** Dirmeyer, P. A., F. J. Zeng, A. Ducharne, R. D. Koster, and J. Morrill, 1999: Sensitivity of surface fluxes to soil water content in three land surface schemes. 14th Conf. on Hydrology, American Meteorological Society, 225-227.
- C24.** Dirmeyer, P. A., and K. L. Brubaker, 1999: The sources of moisture for warm season precipitation over the United States. 14th Conf. on Hydrology, American Meteorological Society, 309-311.
- C23.** Oki, T., T. Nishimura, and P. Dirmeyer, 1999: Validation of runoff by land surface models in major river basins of the globe using TRIP. 14th Conf. on Hydrology, American Meteorological Society, 222-223.
- C22.** Dirmeyer, P. A., and K. L. Brubaker, 1998: Contrasting the hydrologic cycle during the drought of 1988 and the flood of 1993. Abs. Vol. GCIP Miss. Riv. Climate Conf., 246.
- C21.** Dirmeyer, P. A., 1998: The impact of GSWP soil wetness analyses on GCM simulations of summer climate over the United States. Abs. Vol. GCIP Miss. Riv. Climate Conf., 131.
- C20.** Dirmeyer, P. A., and K. L. Brubaker, 1998: Using hourly precipitation data and NCEP reanalysis to investigate the hydrologic cycle during the drought of 1988 and the flood of 1993. Special Symp. on Hydrology, American Meteorological Society, 314-316.
- C19.** Dirmeyer, P. A., and K. L. Brubaker, 1998: Contrasting the hydrologic cycle during the drought of 1988 and the flood of 1993. Proc. 9th Symp. Global Change Studies, American Meteorological Society, 36-38.

- C18.** Dirmeyer, P. A., 1997: "What is the state of global and regional models in simulating precipitation, soil wetness, surface temperature, and runoff?" Modeling Strategy for Regional Climate Prediction and Assessment over North America: A PACS/GCIP Workshop, Silver Spring, Maryland, USA.
- C17.** Dirmeyer, P. A., 1997: Global water and energy flux data from the Global Soil Wetness Project. Eos, Transactions, Amer. Geophys. Union, 1997 Spring Meeting, 78, S156.
- C16.** Dirmeyer, P. A., 1997: Can seasonal climate simulation be improved by the GSWP soil wetness climatology? Proc. 13th Conf. on Hydrology, American Meteorological Society, 169.
- C15.** Dirmeyer, P. A., 1997: The sensitivity of soil wetness, runoff and surface fluxes to infiltration properties. Proc. 13th Conf. on Hydrology, American Meteorological Society, 335-336.
- C14.** Dirmeyer, P. A., J. L. Kinter and B. E. Doty, 1996: Predicting skill for ensemble characteristics in the NCEP medium range forecasts. 11th Conf. Numerical Weather Prediction, American Meteorological Society.
- C13.** Dirmeyer, P. A., 1996: The impact of GSWP soil wetness on seasonal climate simulation and predictability. Second Intl. Scientific Conf. on the Global Energy and Water Cycle, World Climate Research Programme, 454.
- C12.** Dirmeyer, P. A., 1996: The sensitivity of GSWP soil wetness to infiltration rate and convective precipitation distribution. Second Intl. Scientific Conf. on the Global Energy and Water Cycle, World Climate Research Programme, 455.
- C11.** Dirmeyer, P. A., 1996: Using the simplified Simple Biosphere model to generate global soil wetness climatologies. Eos, Transactions, Amer. Geophys. Union, 1996 Spring Meeting, 77, S123.
- C10.** Dirmeyer, P. A., 1996: The role of land-sea geometry in determining monsoon circulations. Proc. Symp. Global Ocean-Atmosphere-Land System (GOALS), American Meteorological Society, 140-142.
- C9.** Dirmeyer, P. A. and J. Shukla, 1995: The effect on climate of expansion of the world's deserts. Proc. 6th Symp. Global Change Studies, American Meteorological Society, 6-9.
- C8.** Reale, O., P. A. Dirmeyer and J. Shukla, 1995: Modeling the effects of the African rainforest on climate. 6th Symp. Global Change Studies, American Meteorological Society.
- C7.** Dirmeyer, P. A. 1995: An objective river routing scheme for runoff models. Proc. Conf. On Hydrology, American Meteorological Society, 91-92.
- C6.** Dirmeyer, P. A., 1994: The response of climate to subtropical desertification in a GCM with idealized topography. Proc. 6th Conf. Climate Variations, American Meteorological Society, 37-40.
- C5.** Dirmeyer, P. A., and J. Shukla, 1994: The response of the general circulation to deforestation in the tropics. Proc. 5th Symp. Global Change Studies, American Meteorological Society, 131-134.
- C4.** Dirmeyer, P. A., 1993: Vegetation as a feedback in mid-latitude drought. Eos, Transactions, Amer. Geophys. Union, 1993 Spring Meeting, 74, 64
- C3.** Shukla, J., and P. A. Dirmeyer, 1993: The importance of albedo in determining climate response to tropical deforestation. Eos, Transactions, Amer. Geophys. Union, 1993 Spring Meeting, 74, 67.
- C2.** Dirmeyer, P. A., 1991: The impact on climate of Amazon deforestation in a GCM with interactive clouds. Proc. 5th Conf. Climate Variations, American Meteorological Society, 271-273.
- C1.** Dirmeyer, P. A., 1989: The role of non-linearity in the structure of stationary waves in a one-layer spectral model. Proc. 7th Conf. on Atmospheric and Oceanic Waves and Stability, American Meteorological Society, 60.

Other Meetings:

- M158.** NASA Planetary Boundary Layer Community Meeting, College Park, MD, USA, 2-4 October 2023.
- M158.** NASA Planetary Boundary Layer Community Meeting, College Park, MD, USA, 2-4 October 2023.
- M158.** NASA Planetary Boundary Layer Community Meeting, College Park, MD, USA, 2-4 October 2023.
- M158.** NASA Planetary Boundary Layer Community Meeting, College Park, MD, USA, 2-4 October 2023.
- M158.** NASA SMAP Science Team Meeting #17, (attended virtually), Pasadena, CA, USA, 15-17 February 2023.
- M157.** WWRP/WCRP Seasonal to Subseasonal (S2S) Steering Group Meeting, online, 8-10 November 2022.
- M156.** NOAA Unified Forecast System (UFS) Research to Operations (R2O) Quarterly Performance Review Meeting, online, 12 October 2022.

- M155.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting (attended virtually), Monterrey, CA, USA, 25-29 July 2022.
- M154.** NOAA Unified Forecast System (UFS) Research to Operations (R2O) Quarterly Performance Review Meeting, online, 18 July 2022.
- M153.** NCAR Advanced Study Program Workshop on Subseasonal-to-Seasonal Science and Predictions, Boulder, CO, USA, 11-15 July 2022.
- M152.** Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Virtual Meeting, online, 2 June 2022.
- M151.** WWRP/WCRP Seasonal to Subseasonal (S2S) Steering Group Meeting, online, 11 May 2022.
- M150.** Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Diagnostics Team Meeting, online, 26 April 2022.
- M149.** NOAA Unified Forecast System (UFS) Research to Operations (R2O) Quarterly Performance Review Meeting, online, 4-5 April 2022.
- M148.** Invited panelist, American Meteorological Society (AMS) Strategies for Building an Inclusive Hydrometeorology Community, online, 25 February 2022.
- M147.** Consistent Representation of Temporal Variations of Boundary Forcings in Reanalyses and Seasonal Forecasts (CONFESS) General Assembly Meeting, online, 1 December 2021.
- M146.** Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Team Meeting, online, 10 November 2021.
- M145.** NASA SMAP Science Team Meeting #16, online, 2-3 November 2021.
- M144.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, online, 25-28 October 2021.
- M143.** WWRP/WCRP Seasonal to Subseasonal (S2S) Steering Group Meeting, online, 19-21 October 2021.
- M142.** NASA Bedrock-to-Boundary Layer Scoping Study Team Kickoff Meeting, online, 3 September 2021.
- M141.** National Soil Moisture Workshop, online, 18-19 August 2021.
- M140.** Invited participant, NCAR Advanced Study Program Workshop on Subseasonal-to-Seasonal Science and Predictions, online, 2-6 August 2021.
- M139.** Invited participant, NCAR Advanced Study Program Summer Colloquium on Subseasonal-to-Seasonal Science and Predictions, online, 12-23 July 2021.
- M138.** Unified Forecast System (UFS) Research to Operations (R2O), First Annual PI Meeting, online, 12-15 July 2021.
- M137.** NOAA Modeling Analysis Prediction and Projection (MAPP) Climate Process Team (CPT) Meeting: Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP), online, 23 June 2021.
- M136.** Unified Forecast System (UFS) Land Modeling Workshop, online, 25-26 May 2021.
- M135.** GEWEX Scientific Steering Group Meeting #33, online, 3-6 May 2021.
- M134.** Soil Moisture Network Operators Workshop, online, 8, 10 March 2021.
- M133.** NCAR Land Model Working Group (LMWG) Meeting, online, 24-25 February 2021.
- M132.** Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Diagnostic Team Meeting, online, 17 February 2021.
- M131.** NOAA/CPO/ESSM - DOE/ESSD Precipitation Processes and Predictability Workshop, online, 30 November – 2 December 2020.
- M130.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, online, 23-25 November 2020.
- M129.** Consistent Representation of Temporal Variations of Boundary Forcings in Reanalyses and Seasonal Forecasts (CONFESS) Kickoff Meeting, online, 3-4 November 2020.
- M128.** NASA SMAP Science Team Meeting #14, online, 6-7 October 2020.
- M127.** WWRP/WCRP Seasonal to Subseasonal (S2S) Steering Group Meeting, online, 22-24 September 2020.
- M126.** Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP), LES Meeting, online, 5 August 2020.
- M125.** Unified Forecast System (UFS) Users' Workshop, online, 27-29 July 2020.

- M124.** NASA Planetary Boundary Layer Incubation Workshop, online, 19-20 May 2020.
- M123.** Unified Forecast System (UFS) Research to Operations (R2O) Kick-Off Meeting, online, 9-10 July 2020.
- M122.** NOAA Modeling Analysis Prediction and Projection (MAPP) Climate Process Team (CPT) Meeting: Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP), online, 30-31 March 2020.
- M121.** GEWEX Scientific Steering Group Meeting #32, Pasadena, CA, USA, 27-31 January 2020.
- M120.** Coupling of Land and Atmospheric Subgrid Parameterizations (CLASP) Diagnostic Team Meeting, online, 4 December 2019.
- M119.** Subseasonal Experiment (SubX) Review meeting, National Center for Weather and Climate Prediction, College Park, MD, USA, 19 August 2019.
- M118.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel meeting, Boulder, CO, USA, 6-8 August 2019.
- M117.** GEWEX Scientific Steering Group Meeting #31, Geneva, Switzerland, 25 February-1 March 2019.
- M116.** Invited participant, "International Workshop of First Phase of GEWEX/GASS ILSTSS2S Initiative and TPEMIP" Washington, DC, USA. 8-9 December 2018.
- M115.** Invited participant, "Enabling FAIR Data – Stakeholder Meeting" Alexandria, Virginia USA. 16-17 November 2017.
- M114.** Invited participant, "Briefing to the US CLIVAR Summit PPAI Panel Breakout: NOAA S2S Prediction Task Force" US CLIVAR Summit, Baltimore, MD USA. 9 August 2017.
- M113.** WWRP/WCRP Seasonal to Subseasonal (S2S) Steering Group Meeting, Columbia University, New York, New York, USA, 8-9 December 2016.
- M112.** NOAA Modeling Analysis Prediction and Projection (MAPP) Subseasonal-to-Seasonal (S2S) Prediction Task Force Kick-Off Meeting, Lamont-Doherty Earth Observatory, Palisades, New York, USA, 5 December 2016.
- M111.** Co-organizer, 8th EGU Leonardo Conference: "From Evaporation to Precipitation: the Atmospheric Moisture Transport", European Geophysical Union, Ourense, Spain, 25-27 October 2016.
- M110.** Invited participant, WCRP Workshop: "Climate Science: Thinking out of the Box", ICSU Secretariat, Paris, France, 23-24 June 2016.
- M109.** "Confronting CLM with land surface observations" presented by A. Tawfik, NCAR Land Model Working Group (LMWG) Meeting, Boulder, Colorado, 3 March 2015.
- M108.** Session Chair and Workshop Advisory Committee Member, 6th International Workshop on Catchment Hydrological Modeling and Data Assimilation (CAHMDA-VI) and 3rd International Workshop on Data Assimilation for Operational Hydrology and Water Management of the Hydrologic Ensemble Prediction Experiment (HEPEX-DAFOH III), Austin, Texas, USA, September 8-12, 2014.
- M107.** Co-convener and speaker on "Scientific Challenges", NSF Hydrologic-Atmospheric Community Workshop, Colorado School of Mines, Golden, Colorado, USA, 3-5 September 2014.
- M106.** Co-convener, Theme 3 Interactions between sub-systems – Topic on Land-atmosphere interactions and water cycle, World Weather Open Sci. Conf. (WWOSC), Montréal, Canada, 16-21 August, 2014.
- M105.** WWRP/WCRP Seasonal to Subseasonal (S2S) Steering Group Meeting, Environment Canada, Montréal, Canada, 22 August 2014.
- M104.** Co-convener, 7th International GEWEX Science Conference, World Forum, The Hague, The Netherlands, 17-21 July 2014.
- M103.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, The Hague, The Netherlands, 17-21 July 2014.
- M102.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, Exeter, Devon, UK, 16-18 October 2013.
- M101.** GEWEX Diurnal Coupling Experiment (DICE) workshop, Exeter, Devon, UK, 16-18 October 2013.
- M100.** "Seasonal climate forecasts in past, present and future climate – Role of the land surface" NCAR Land Model Working Group (LMWG) Meeting, Boulder, Colorado, 20 February 2013.
- M99.** GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, Denver, Colorado, USA, 23 October 2011.

- M98.** NOAA Water Cycle Science Challenge Workshop, Boulder, Colorado, USA, 30 August-1 September 2011.
- M97.** NASA Gravity Recovery and Climate Experiment (GRACE) Science Review Panel, Potomac, Maryland, USA, 26-27 July 2011.
- M96.** Terrestrial Regional North American Hydroclimate Experiment (TRACE) Community Discussion Workshop, Silver Spring, Maryland, USA, 18-20 April 2011.
- M95.** "Multi-Model Approaches to Improve Land Surface Analyses" GEWEX/iLEAPS LANDFLUX Meeting, Melbourne, Australia 23 August 2009.
- M94.** "CLM-related research at COLA" Presented at NCAR CCSM Land Model Working Group, Boulder, Colorado, USA, 30-31 March 2009.
- M93.** World Climate Research Programme (WCRP)/ Climate Variability (CLIVAR)/ Variability of American Monsoon Systems (VAMOS) Panel 11, Miami, Florida, USA. 25-27 March 2008.
- M92.** Community Climate System Model (CCSM) Land Model Working Group (LMWG), Boulder, Colorado, USA, 20-21 February 2008.
- M91.** Center for Research on Environment and Water (CREW) WaterNet Team Meeting, Calverton, Maryland, USA, 19-20 November 2007.
- M90.** 12th Annual CCSM Workshop, Breckenridge, Colorado, USA, 19 – 21 June 2007.
- M89.** Board on Atmospheric Science and Climate (BASC), Climate Research Committee (CRC) Spring Meeting, Washington, DC, USA, 16-17 May 2007.
- M88.** 3rd Working Group on Numerical Experimentation (WGNE) Workshop on Systematic Errors in Climate and NWP Models, San Francisco, California, USA, 12-16 February 2007.
- M87.** BASC, CRC WCRP Round-Table, Washington, DC, USA, 30 November 2006.
- M86.** NASA Energy and Water System (NEWS) PI Meeting, College Park, Maryland, USA, 26-28 September 2006.
- M85.** US African Monsoon Multi-disciplinary Analysis (AMMA) Workshop, Silver Spring, Maryland, USA, 4-5 May 2006.
- M84.** National Science Foundation (NSF) Workshop on Innovation and Discovery, Arlington, Virginia, USA, 17-18 May 2006.
- M83.** US Dept. Agriculture (USDA) Agricultural Research Service (ARS) Hydrology and Remote Sensing Laboratory (HRSL) Review, Beltsville, Maryland, USA, 21 February 2006.
- M82.** Joint Session of the 21st CAS/JSC Working Group on Numerical Experimentation (WGNE) and 9th GEWEX Modeling and Prediction Panel (GMPP), St. Petersburg, Russia, 8-12 November 2005.
- M81.** 6th GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, KNMI, DeBilt, Netherlands, 21-23 September 2005.
- M80.** Joint Global Land Atmosphere System Study (GLASS) GEWEX Atmospheric Boundary Layer Study (GABLS) Workshop, KNMI, DeBilt, Netherlands, 19-21 September 2005.
- M79.** Observational and Modelling Requirements for Predicting Drought on Seasonal to Decadal Time Scales, University of Maryland, College Park, Maryland, USA, 17-19 May 2005.
- M78.** International Satellite Land-Surface Climatology Project (ISLSCP) Science and Evaluation Workshop, University of Maryland Baltimore County, Catonsville, Maryland, USA, 3-5 May 2005.
- M77.** European Land Data Assimilation System (ELDAS) workshop on Land Surface Assimilation, European Centre for Medium-range Weather Forecasts, Reading, United Kingdom, 8-11 November 2004
- M76.** Joint Session of the 20th CAS/JSC Working Group on Numerical Experimentation (WGNE) and 8th GEWEX Modeling and Prediction Panel (GMPP), United Kingdom Meteorological Office, Exeter, United Kingdom, 11-15 October 2004.
- M75.** NASA Terrestrial Hydrology Program Meeting, University of Maryland, College Park, Maryland, USA, 5-8 October 2004.
- M74.** 5th GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, Heian Conference Center, Kyoto, Japan, 13-15 September 2004.
- M73.** Workshop on the Second Global Soil Wetness Project (GSWP-2), Heian Conference Center, Kyoto, Japan, 15-17 September 2004.

- M72.** Targeted training activity - Course on climate dynamics for climate research centers and university lecturers, The Abdus Salam International Center for Theoretical Physics, Trieste, Italy, 9-27 August, 2004.
- M71.** Integrated Land Ecosystem-Atmosphere Process Study (iLEAPS) Scientific Steering Committee Meeting, Helsinki, Finland, 28-29 June 2004.
- M70.** Symposium on Climate Dynamics and Predictability, Center for Ocean-Land-Atmosphere Studies, 18 June 2004.
- M69.** Climate system Observational and Prediction Experiment (COPE) Workshop on Seasonal Prediction, East-West Center, Honolulu, Hawaii, USA, 3-5 November, 2003.
- M68.** Global Water System Project (GWSP) Open Science Conference, Portsmouth, New Hampshire, USA, 7-9 October 2003.
- M67.** Project to Intercompare Land-surface Parameterization Schemes (PILPS) Semi-Arid (San Pedro/Seville) Workshop, Tucson, Arizona, USA, 27-29 August, 2003.
- M66.** 4th GEWEX Global Land Atmosphere System Study (GLASS) Science Panel Meeting, Tucson, Arizona, USA, 25-27 August, 2003.
- M65.** 3rd Global Water Cycle Program (GWCP) Science Steering Group Meeting, National Science Foundation, Arlington, Virginia, USA, 18-19 August 2003.
- M64.** North American Monsoon Experiment (NAME) Modeling and Data Assimilation R&D Workshop, College Park, Maryland, USA, 6 June 2003.
- M63.** NASA/CLIVAR Subseasonal Workshop, College Park, Maryland, USA, 4-5 June 2003.
- M62.** NAME 4th Scientific Working Group Meeting, Boulder, Colorado, USA, 9-10 January 2003.
- M61.** Global Water Cycle Program (GWCP) Science Steering Group Meeting, Bethesda, Maryland, USA, 6-7 January 2003.
- M60.** US-CLIVAR Pan-American Panel Meeting, Albuquerque, New Mexico, USA, 17-18 December 2002.
- M59.** ISLSCP Future Strategy and Initiative II Meeting, Silver Spring, Maryland, USA, 8-9 October 2002
- M58.** 3rd GLASS Science Panel Meeting, COLA, Calverton, Maryland, USA, 2-4 October, 2002.
- M57.** GSWP-2 Kickoff Meeting, COLA, Calverton, Maryland, USA, 30 September-1 October 2002.
- M56.** Global Water Cycle Program (GWCP) Science Steering Group Meeting, Beltsville, Maryland, USA, 29-31 July 2002.
- M55.** Climate of the Twentieth Century (C20C) Workshop, COLA, Calverton, Maryland, USA, 22-25 January 2002.
- M54.** 2nd GLASS Science Panel Meeting, Mètèo-France, Toulouse, France, 7-9 November, 2001.
- M53.** GSWP Rhône/AGG Project Workshop, Mètèo-France, Toulouse, France, 5-7 November, 2001.
- M52.** NASA/NOAA GAPP & Land Surface Hydrology Joint PI Meeting, Potomac, Maryland, USA, 30 April-4 May 2001.
- M51.** BAHC Synthesis Meeting, Aalsmeer, Netherlands, 7-8 March, 2001
- M50.** CEOP International Workshop, NASA/GSFC, Greenbelt, Maryland, USA, 27 February-1 March 2001.
- M49.** LBA Ecology Open Meeting, Atlanta, Georgia, USA, 12-14 February 2001.
- M48.** ISLSCP Initiative II Mid-Course Workshop, NASA/GSFC, Greenbelt, Maryland, USA, 15-17 November 2000.
- M47.** US CLIVAR Pan-American Principal Investigators Meeting, Potomac, Maryland, USA, 6-8 September 2000.
- M46.** 1st GLASS Science Panel Meeting, Lucas Heights, New South Wales, Australia, 19-21 July 2000.
- M45.** CLIVAR Pan-American Climate System (PACS) Implementation Panel Meeting, Portland, Oregon, USA, 7-8 June 2000.
- M44.** CLIVAR Seasonal-to-Interannual Modeling, Analysis and Prediction (SIMAP) Panel Meeting, Calverton, Maryland, USA, 22-24 May 2000.
- M43.** GEWEX/BAHC International Workshop on Soil Moisture Monitoring, Analysis and Prediction, Norman, Oklahoma, USA, 16-18 May 2000.
- M42.** Global Soil Wetness Project GSWP1.5 & GSWP2 Planning Workshop, Norman, Oklahoma, USA, 15 May 2000.
- M41.** ISLSCP/BAHC Science Panel Meeting and BAHC Synthesis Editors Meeting, Caracas, Venezuela, 10-15 April 2000.

- M40.** GCIP PI Meeting and GEWEX America Prediction Project (GAPP) Planning Meeting, Potomac, Maryland, USA, 27-28 March 2000.
- M39.** US CLIVAR Joint Panel Meeting, Costa Mesa, California, USA, 14-15 January 2000.
- M38.** GEWEX/INSU International Workshop on Modeling Land-Surface Atmosphere Interactions and Climate Variability, Gif-sur-Yvette, France, 4-8 October, 1999.
- M37.** BAHC/GCTE/GEWEX Workshop on Modeling Root Water Uptake in Hydrological and Climate Models, Gif-sur-Yvette, France, 30 September - 2 October 1999.
- M36.** GEWEX Continental-scale International Project (GCIP) Principal Investigators Meeting, College Park, Maryland, 17-19 May 1999.
- M35.** Global Precipitation Climatology Project (GPCP) User Workshop, Silver Spring, Maryland, 10-12 May 1999.
- M34.** First Biospheric Aspects of the Hydrologic Cycle (BAHC) Synthesis Workshop, Obereggen, Italy, 6-12 March 1999.
- M33.** Common Land Model Development Workshop, Tucson, Arizona, 1-3 March 1999.
- M32.** International Workshop on the Land-Surface Water Budget, Tsukuba, Japan, 19-21 January 1999.
- M31.** Joint CAS/JSC Working Group on Numerical Experimentation (WGNE) 14th Session, and GEWEX Modelling and Prediction Panel (GMPP), Second Session, RPN, Montreal, Quebec, Canada, 2-6 November 1998.
- M30.** NASA EOS Investigators Working Group Meeting, University of New Hampshire, Durham, New Hampshire, 19-21 October 1998.
- M29.** ECMWF and WCRP/GEWEX Workshop on Modelling and Data Assimilation for Land-Surface Processes, ECMWF, Reading, England, 29 June - 2 July 1998.
- M28.** NCAR Climate System Model (CSM) Workshop, Breckenridge, Colorado, 22-24 June 1998.
- M27.** IGBP Biospheric Aspects of the Hydrologic Cycle (BAHC) 8th Scientific Steering Committee Meeting, UNESCO Headquarters, Paris, France, 30 April - 1 May 1998.
- M26.** International Workshop on Land Surface Data in Climate and Weather Models, UNESCO Headquarters, Paris, France, 28-29 April 1998.
- M25.** International Satellite Land-Surface Climatology Project (ISLSCP) Science Panel Meeting, UNESCO Headquarters, Paris, France, 27-28 April 1998.
- M24.** GCIP Post-2000 Vision Meeting, Wheaton, Maryland, 20-21 April 1998.
- M23.** Southern Great Plains 1997 (SGP97) Hydrology Project Workshop, Columbia, Maryland, 3-5 March 1998.
- M22.** CSM Land-Model Working Group Meeting, Boulder, Colorado, 19-20 February 1998
- M21.** World Climate Research Programme First International Conference on Reanalyses, Silver Spring, Maryland, USA, 27-31 October 1997.
- M20.** International Satellite Land-Surface Climatology Project (ISLSCP) Science Panel Meeting, Silver Spring, Maryland, USA, 10-11 July 1997.
- M19.** NCAR Climate System Model (CSM) Workshop, Breckenridge, Colorado, USA, 24-26 June 1997.
- M18.** IGBP Biospheric Aspects of the Hydrologic Cycle (BAHC) 7th Scientific Steering Committee Meeting, Polson, Montana, USA, 29 May-1 June 1997.
- M17.** GEWEX/IGBP Workshop on Land-Surface Parameterizations and Soil-Vegetation-Atmosphere Transfer Schemes, La Jolla, California, USA, 10-14 February 1997.
- M16.** Session Chair, AMS Conference on Hydrology, Long Beach, California, USA, 2-8 February 1997.
- M15.** Chair, GEWEX Global Soil Wetness Project (GSWP) Final Meeting, Long Beach, California, USA, 8 February 1997.
- M14.** Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA) Science Meeting, São Jose dos Campos, Brazil, 27-29 June 1996.
- M13.** Chair, GEWEX Global Soil Wetness Project (GSWP) Meeting, Goddard Space Flight Center, Greenbelt, Maryland, USA, 30-31 May 1996.
- M12.** ISLSCP Science Panel Meeting, Goddard Space Flight Center, Greenbelt, Maryland, USA, 29-30 May 1996.

- M11.** Intergovernmental Panel on Climate Change (IPCC) Working Group II; Regional Impacts Study Meeting, Washington, DC, USA, 15-16 May 1996.
- M10.** Chair, GEWEX GSWP production team meeting, Center for Ocean-Land-Atmosphere Studies, Calverton, Maryland, USA, 24-25 August 1995.
- M9.** International Union of Geodesy and Geophysics, XXI General Assembly, Boulder, Colorado, USA, 2-14 July 1995.
- M8.** ISLSCP Science Panel Meeting, Goddard Space Flight Center, Greenbelt, Maryland, USA, 15-16 June 1995.
- M7.** GEWEX Global Soil Wetness Workshop, Longmont, Colorado, USA, 4-6 October 1994.
- M6.** Chair, Meeting on Problems in Initializing Soil Wetness, Center for Ocean-Land-Atmosphere Studies, Calverton, Maryland, USA, 19 August 1994.
- M5.** NATO Workshop on Prediction of Interannual Climate Variations, July 1991, International Center for Advanced Studies, Trieste, Italy, sponsored by the NATO Science Committee.
- M4.** Summer School for Earth Sciences, "Processes of Global Change", August 1990, California Institute of Technology, Pasadena, California, USA, sponsored by NASA Jet Propulsion Laboratory.
- M3.** Mini Symposium on Climate and Global Change, June 1990, International Center for Earth and Environmental Sciences, Trieste, Italy, sponsored by the United Nations Industrial Development Organization.
- M2.** Workshop on the 1988 United States Drought, May 1990, Center for Ocean-Land-Atmosphere Interactions and Department of Meteorology, University of Maryland, College Park, Maryland.
- M1.** "The role of non-linearity in the structure of stationary waves in a one-layer spectral model." Paper presented at Graduate Research Interaction Day, University of Maryland, sponsored by the Graduate Student Association, 19 April 1989.