

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2017:

1. Alvez LM, Marengo JA, Fu Rong, **Bombardi RJ** (2017) Sensitivity of Amazon Regional Climate to Deforestation. *American Journal of Climate Change*, DOI: 10.4236/ajcc.2017.61005
2. **Bombardi RJ, Pegion KV, Kinter JL, Cash B, Adams JM** (2017) Sub-seasonal Predictability of the Onset and Demise of the Rainy Season over Monsoonal Regions. *Front. Earth Sci.*, DOI: 10.3389/feart.2017.00014
3. **Burls, N. J.**, & Fedorov, A. V. 2017: Wetter subtropics in a warmer world: contrasting past and future hydrological cycles, *PNAS*, Under 2nd Review.
4. **Cash, B.**, R. Barimalala, **J. Kinter**, *et al.*, 2017: Sampling variability and the changing ENSO-monsoon relationship. *Clim. Dyn.*, 48, 4071-4079
5. **Cash, B.A., J. V. Manganello, J. L. Kinter III** "Evaluation of NMME temperature and precipitation bias and forecast skill for South Asia", *Clim. Dyn.*, doi: 10.1007/s00382-017-3841-4, 2017.
6. **Cash BA**, Singh B, **Manganello JV**, 2017: Evaluation of NMME temperature and precipitation forecast skill for South Asia. *Cli. Dyn.*, DOI: <https://doi.org/10.1007/s00382-017-3841-4>
7. **Chen, L., P. A. Dirmeyer**, A. Tawfik, and D. M. Lawrence, 2017: Sensitivities of Land Cover-Precipitation Feedback to Convective Triggering. *Journal of Hydrometeorology*, 18, 2265-2283, doi: 10.1175/JHM-D-17-0011.1.
8. **Chen, L.** and **P. A. Dirmeyer**, 2017: Impacts of Land Use/Land Cover Change on Afternoon Precipitation over North America. *Journal of Climate*, 30, 2121-2140, doi: 10.1175/JCLI-D-16-0589.1.
9. **Colfescu, I.** and **E. K. Schneider**, 2017: Internal atmospheric noise characteristics in 20th century coupled atmosphere-ocean model simulations. *Climate Dyn.*, 49, 2205-2217, DOI 10.1007/s00382-016-3440-9.
10. Feng, X., **B. Huang**, B.P. Kirtman, **J.L. Kinter**, and L.S. Chiu, 2017: A multi-model analysis of the resolution influence on precipitation climatology in the Gulf Stream region. *Clim. Dyn.*, 48, 1685-1704; doi 10.1007/s00382-016-3167-7
11. Garuba, O. A., and **B. A. Klinger**, 2017: The role of CO2 induced air-sea fluxes changes in the passive and active Ocean Heat Uptake, sub J Clim
12. Hannachi, A., **D. M. Straus**, S. Corti and T. Woollings, 2017. Nonlinearity and Regime Behavior in the Northern Hemisphere Extra-Tropical Atmosphere: A Review. *Rev. Geophys.*, 55, doi:10.1002/2015RG000509
13. Hazra, A., and **V. Krishnamurthy**, 2017: Seasonality and mechanisms of tropical intraseasonal oscillations. *Clim. Dyn.*, doi: 10.1007/s00382-017-3596-y.
14. Hu, Z.-Z., A. Kumar, **B. Huang**, J. Zhu and H.-L. Ren, 2017: Interdecadal variations of ENSO around 1999/2000. *J. Meteor. Res.*, 31(1), 73–81, doi: 10.1007/s13351-017-6074-x.
15. Hu, Z.-Z., A. Kumar, **B. Huang**, J. Zhu, R.-H. Zhang, and F.-F. Jin, 2017: Asymmetric evolution of El Niño and La Niña: The recharge/discharge processes and role of the off-equatorial sea surface high anomaly. *Clim. Dyn.*, 49 (7-8), 2737-2748. DOI: 10.1007/s00382-016-3498-4.
16. Hu, Z.-Z., **B. Huang**, Y.-H. Tseng, W. Wang, A. Kumar, J. Zhu, and B. Jha, 2017: Does vertical temperature gradient of the atmosphere matter for El Niño development? *Clim. Dyn.*, 48, 1413-1429, doi 10.1007/s00382-016-3149-9.
17. Hu, Z.-Z., A. Kumar, B. Jha, J. Zhu, and **B. Huang**, 2017: Persistence and predictions of the remarkable warm anomaly in the northeastern Pacific Ocean during 2014-2016. *J. Climate*, 30, 689-702. doi: <http://dx.doi.org/10.1175/JCLI-D-16-0348.1>
18. Hu, Z.-Z., A. Kumar, J. Zhu, **B. Huang**, Y.-h. Tseng, and X. Wang, 2017: On the shortening of the lead time of ocean warm water volume to ENSO SST since 2000. *Sci. Rep.*, 7: 4294, doi: 10.1038/s41598-017-04566-z.

## COLA REFEREED PUBLICATIONS 1993-Present

---

19. **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.
20. **Krishnamurthy, V.**, 2017: Predictability of CFSv2 in the tropical Indo-Pacific region at daily and subseasonal time scales. *Clim. Dyn.*, doi:10.1007/s00382-017-3855-y
21. **Krishnamurthy, V.**, and A. Sharma, 2017: Predictability at intraseasonal time scale. *Geophys. Res. Lett.*, **44**, doi:10.1002/2017GL074984.
22. Lu, J., K. Sakaguchi, Q. Yang, R. Leung, G. Chen, C. Zhao, **E. Swenson**, and Z. Hou, 2017: Examining the hydrological variations in an aquaplanet world using wave activity transformation. *J. Climate*, **30**, 2559-2576, doi: <http://dx.doi.org/10.1175/JCLI-D-16-0561.1>
23. **Manganello, J. V., B. A. Cash, K. I. Hodges, and J. L. Kinter III** "Seasonal forecasts of North Atlantic tropical cyclone activity in the North American Multi-Model Ensemble", *Clim. Dyn.*, doi: 10.1007/s00382-017-3670-5, 2017
24. Martinez PP, Reiner RC, Roy M, **Cash BA**, Yunus Md, Faruque ASG, Huq S, King AA, Pascual M, 2017: Cholera forecast for Dhaka, Bangladesh, with the 2016 El Niño. *PLoS One*, <https://doi.org/10.1371/journal.pone.0172355>.
25. Piecuch, C. G., R. M. Ponte, C. M. Little, **M. W. Buckley**, and I. Fukumori (2017), Mechanisms underlying recent decadal changes in subpolar North Atlantic Ocean heat content, *J. Geophys. Res. Oceans*, **122**, doi:10.1002/2017JC012845
26. Rowan, E. E., J. Kotcher, J. Walsh-Thomas, P. K. Baldwin, J. Trowbridge, J. T. Thaker, H. J. Witte, **B. A. Klinger**, L. Cohen, C. Tresch, and E. W. Maibach, 2017: Explaining local impacts of climate change: TV meteorologists as climate science educators, in H. D. O'Hair, ed., *Risk and Health Communication in an Evolving Media Environment*, CRC Press, 366 pp.
27. **Shin, C.-S.** and **B. Huang**, 2017: A spurious warming trend in the NMME equatorial Pacific SST hindcasts. *Clim. Dyn.*, published online, DOI 10.1007/s00382-017-3777-8.
28. **Shukla, R. P., B. Huang, L. Marx, J. L. Kinter, C.-S. Shin**, 2017: Predictability and Prediction of Indian summer Monsoon by CFSv2: Implication of the Initial Shock Effect. *Clim. Dyn.*, published online, DOI:10.1007/s00382-017-3594-0.
29. Singh B, **Cash BA**, 2017: Evaluation of Indian Monsoon in NMME: Mean and intraseasonal variability. *Cli. Dyn.*, *accepted*
30. **Srivastava, A.** and **T. DelSole**, 2017: Decadal Predictability Without Ocean Dynamics, *Proc. Nat. Aca. Sci.*, **115**, 2177-2182.
31. **Stan, C., D. M. Straus**, J. S. Frederiksen, H. Lin, E. D. Maloney, and C. Schumacher, 2017: Review of tropical-extratropical teleconnections on intraseasonal time scales, *Rev. Geophys.*, doi:10.1002/2016RG000538
32. **Straus, D., M.**, F. Molteni, and S. Corti: The Link between Weather and the Large Scale Circulation, in *Nonlinear and Stochastic Climate Dynamics*, Cambridge University Press, 2017, ISBN 9781107118140.
33. Sun, L., B. Shen, B. Sui and **B. Huang**, 2017: The influences of East Asia monsoon on summer precipitation in Northeast China. *Clim. Dyn.*, **48**, 1647-1659, doi:10.1007/s00382-016-3165-9.
34. **Swenson, E.**, and **D. M. Straus**, 2017: Rossby Wave Breaking and Transient Eddy Forcing During Euro-Atlantic Circulation Regimes. *J. Atmos. Sci.*, **74**, 1735-1755
35. Xu, K. -M., Z. Li, A. Cheng, P. N. Blossey, and **C. Stan**, 2017: Differences in the hydrological cycle and sensitivity between multiscale modeling frameworks with and without a higher order turbulence closure. *J. Adv. Model. Earth Sys.*, doi:10.1002/2017MS000970
36. Yadav, P. and **D. M. Straus**, 2017: Circulation Response to Fast and Slow MJO Episodes. *Mon. Wea. Rev.*, **145**, 1577-1596

## COLA REFEREED PUBLICATIONS 1993-Present

---

37. Zhang, T., **B. Huang**, S. Yang, and **J. L. Kinter**, 2017: Predictable patterns of the atmospheric low-level circulation over the Indo-Pacific region in Project Minerva: seasonal dependence and intra-ensemble variability. Submitted to *J. Climate*.
38. Zhang, T., **B. Huang**, S. Yang, and C. Laohalertchai, 2017: Seasonal dependence of the predictable low-level circulation patterns over the tropical Indo-Pacific domain. *Clim. Dyn.*, published online, doi: 10.1007/s00382-017-3874-8.
39. Zhu, J., A. Kumar, W. Wang, Z.-Z. Hu, **B. Huang**, and M. A. Balmaseda, 2017: Importance of convective parameterization in ENSO predictions. *Geophys. Res. Lett.*, 6334–6342, DOI: 10.1002/2017GL073669.

### 2016:

1. Ballester J, Petrova D, Bordoni S, **Cash B.A.**, Garcia-Diez M, Rodo X, 2016: Sensitivity of El Niño intensity and timing to preceding subsurface heat magnitude. *Scientific Reports*, doi:10.1038/srep36344.
2. **Bombardi, R. J.**, A. B. Tawfik, **J. V. Manganello**, **L. Marx**, **C.-S. Shin**, H. Subhadeep, **E. K Schneider**, **P. A. Dirmeyer**, **J. L. Kinter III**, 2016: The Heated Condensation Framework as a Convective Trigger in the NCEP Climate Forecast System version 2. *J. Adv. Model. Earth Syst.*, **8**, 1310–1329, doi: 10.1002/2016MS000668.
3. **Bombardi RJ**, Tawfik AB, **Manganello JV**, **Marx L**, **Shin C-S**, Halder S, Schneider EK, **Dirmeyer PA**, **Kinter JL** (2016) The heated condensation framework as a convective trigger in the NCEP climate forecast system version 2. JAMES, DOI: 10.1002/2016MS000668
4. **Buckley, M.W.**, and J. Marshall (2016). Observations, inferences and mechanisms of decadal Atlantic Meridional Overturning Circulation: a review. *Reviews of Geophysics*, 54 (1), 5–63, doi: 10.1002/2015RG000493.
5. **Burls, N.J.**, Fedorov, A.V., Sigman, D.M., Jaccard, S.L., Tiedemann, R. and Haug, G.H., 2016: Deep water formation in the North Pacific during the warm Pliocene, *Science Advances*, 3, e1700156.
6. **Burls N.J.**, Muir L., Vincent E.M., and Fedorov A.V., 2016: Extra-tropical origin of equatorial Pacific cold bias in climate models with links to cloud albedo, *Climate Dynamics*, 49:5-6, 2093-2113, doi:10.1007/s00382-016-3435-6.
7. **Cash B.A.**, et al., 2016: Environmental Suitability and Infectious Disease Risk, NSF white paper.
8. **Cash, B. A.**, R. Barimalala, **J. Kinter III**, **E. L. Altshuler**, **M. J. Fennessy**, **J. V. Manganello**, F. Molteni, P. Towers, and F. Vitart “Sampling Variability and the Changing ENSO-Monsoon Relationship”, *Clim. Dyn.*, doi:10.1007/s00382-016-3320-3, **2016**
9. **Chen, H.**, **E. K. Schneider**, and Z. Wu, 2016: Mechanisms of internally generated decadal-to-multidecadal variability of SST in the Atlantic Ocean in a coupled GCM, *Climate Dyn.*, **46**, 1517-1546. DOI 10.1007/s00382-015-2660-8.
10. **Chen, H.-C.**, Z.-Z. Hu, **B. Huang**, and C.-H. Sui, 2016: The role of reversed equatorial zonal transport in terminating an ENSO event. *J. Climate*, **29**, 5859-5877
11. **Chen, L.** and **P. A. Dirmeyer**, 2016: Adapting observationally based metrics of biogeophysical feedbacks from land cover/land use change to climate modeling. *Environmental Research Letters*, 11, 034002, doi: 10.1088/1748-9326/11/3/034002.
12. **DelSole, T.**, and A. Banerjee, 2016: Statistical Seasonal Prediction Based on Regularized Regression. *J. Climate*, 30, 1345-1361
13. **DelSole, T.**, **L. Trenary**, M. K. Tippett, and **K. Pegion**, 2016: Predictability of Temperature and Precipitation at 3-4 Weeks over the Contiguous United States. *J. Climate*, 30, 3499-3512
14. **DelSole, T.**, **X. Yan**, and M. K. Tippett, 2016: Inferring Aerosol Cooling from Hydrological

## COLA REFEREED PUBLICATIONS 1993-Present

---

- Sensitivity, *J. Climate*, **29**, 6167-6178
15. **Jin, Y.**, and **C. Stan** (2016), Simulation of East Asian Summer Monsoon (EASM) in SP-CCSM4: Part I—Seasonal mean state and intraseasonal variability, *J. Geophys. Res. Atmos.*, 121, 7801–7818, doi:10.1002/2015JD024035.
  16. Krishnamurthy, L., and **V. Krishnamurthy**, 2016: Indian monsoon's relation with the decadal part of PDO in observations and NCAR CCSM4. *Int. J. Climatol.* doi:10.1002/joc.4815
  17. **Krishnamurthy, V.**, 2016: Intraseasonal Oscillations in South Asian and East Asian monsoons. *Clim. Dyn.* doi:10.1007/s00382-016-3466-z.
  18. **Krishnamurthy, V.**, 2016: Tropical intraseasonal oscillation in CFSv2 during boreal summer and winter. *Int. J. Climatol.* doi: 10.1002/joc.4948.
  19. **LaJoie, E.**, and **T. DelSole**, 2016: Changes to Internal Variability in Response to Anthropogenic Forcing: A New Field Significance Test. *J. Climate*, **29**, 5547-5560
  20. **Manganello JV, Cash BA**, Hodges KI, 2016: Seasonal forecasts of North Atlantic tropical cyclone frequency in the North American multi-model ensemble. *Cli. Dyn.*, *submitted*
  21. **Manganello, J. V.**, K. I. Hodges, **B. A. Cash**, **J. L. Kinter III**, **E. L. Altshuler**, **M. J. Fennessy**, F. Vitart, F. Molteni, and P. Towers “Seasonal Forecasts of Tropical Cyclone Activity in a High Atmospheric Resolution Coupled Prediction System”, *J. Climate*, **29**, 1179-1200, **2016**.
  22. Motesharrei, S., **J. Shukla**, et. al. 2016. Modeling Sustainability: Population, Inequality, Consumption, and Bidirectional Coupling of the Earth and Human Systems. *National Science Review*, **3**, 470-494, doi: 10.1093/nsr/nww081
  23. **Palipane, E.**, J. Lu, P. Staten, G. Chen, and **E. K. Schneider**, 2016: Investigating the zonal wind response to SST warming using transient ensemble AGCM experiments. *Climate Dyn.*, **48**, 523-540. DOI 10.1007/s00382-016-3092-9
  24. Randall, D., C. DeMott, **C. Stan**, M. Khairoutdinov, J. Benedict, K. Thayer-Calder, and M. Branson, 2016: Simulations of the tropical general circulation with a multiscale global model. *Meteorol. Monographs*, **56**, 15.1-15.15. doi:10.1175/AMSMONOGRAPHS-D-15-0016.1.
  25. **Shin, C.-S.** and **B. Huang**, 2016: Slow and fast annual cycles of the Asian Summer Monsoon in the NCEP CFSv2. *Clim. Dyn.*, **47**, 529-553, DOI:10.1007/s00382-015-2854-0.
  26. **Shukla, R.**, and **B. Huang**, 2016a: Mean state and interannual variability of the Indian summer monsoon in NCEP CFSv2. *Clim. Dyn.*, **46**, 3845–3864, doi: 10.1007/s00382-015-2808-6.
  27. **Shukla, R.**, and **B. Huang**, 2016b: Interannual variability of the Indian summer monsoon associated with the air-sea feedback in the northern Indian Ocean. *Clim. Dyn.*, **46**, 1977-1990, doi: 10.1007/s00382-015-2687-x. (Journal impact factor: 4.708)
  28. **Shukla, R. P.** and **James L. Kinter (2016)** Sub-seasonal Prediction of Significant Wave Heights over the Western Pacific and Indian Ocean. *Weather and forecasting*, DOI: <http://dx.doi.org/10.1175/WAF-D-16-0078.1>
  29. Tippett, M. K., M. Ranganathan, M. L'Heureux, A. G. Barnston, **T. DelSole**, 2016: Assessing Probabilistic Predictions of ENSO Phase and Intensity from the North American Multimodel Ensemble. *Climate Dynamics*, 1-22
  30. **Trenary, L.**, and **T. DelSole**, 2016: Does the Atlantic Multidecadal Oscillation Get its Predictability from the Atlantic Meridional Overturning Circulation?, *J. Climate*, **29**, 5267-5280
  31. **Trenary, L.**, **T. DelSole**, M. K. Tippett, and **B. Doty**, 2016: Extreme Eastern US Winter of 2015 Not Symptomatic of Climate Change., *Bull. Amer. Meteor. Soc.*, **97**: S31-S35
  32. **Trenary, L.**, **T. DelSole**, M.K. Tippett, and **K. Pegion**, 2016: A New Method for Determining the Optimal Lagged Ensemble. *J. Adv. Model. Earth Syst.*, **9**, 291-306
  33. **Yan, X.**, **T. DelSole**, and M. K. Tippett, 2016: What Surface Observations are Important for Separating the Influences of Anthropogenic Aerosols from Other Forcings? *J. Climate*, **29**, 4165-4184

## COLA REFEREED PUBLICATIONS 1993-Present

---

34. Zhang, T., S. Yang, X. Jiang and **B. Huang**, 2016: Roles of remote and local forcings in the variation and prediction of regional maritime continent rainfall in wet and dry seasons. *J. Climate*, 29, 8871-8879, doi:<http://dx.doi.org/10.1175/JCLI-D-16-0417.1>.
35. Zhu, J. A. Kumar, **B. Huang**, M.A. Balmaseda, Z.-Z. Hu, **L. Marx**, and **J.L. Kinter**, 2016: The role of off-equatorial surface temperature anomalies in the 2014 El Niño prediction. *Scientific Report*, 6: 19677, doi:10.1038/srep19677.
36. Zhu, J., and **J. Shukla**, 2016: Estimation of weather noise in coupled ocean-atmosphere systems using initialized simulations. *J. Climate*, 29, 5675-5688, doi: 10.1175/JCLI-D-15-0737.1
37. Zuidema, P., P. Chang, B. Medeiros, B. P. Kirtman, R. Mechoso, **E. K. Schneider**, T. Toniazzi, I. Richter, R. J. Small, K. Bellomo, P. Brandt, S. de Szoeke, J. T. Farrar, E. Jung, S. Kato, M. Li, C. Patricola, Z. Wang, R. Wood, Z. Xu, 2016: Challenges and prospects for reducing coupled climate model SST biases in the eastern tropical Atlantic and Pacific Oceans: The US CLIVAR Eastern Tropical Oceans Synthesis Working Group, *Bull Amer. Meteor. Soc.*, 97, 2305-2328. DOI 10.1175/BAMS-D-15-00274.1

### 2015:

38. **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.
39. 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.
40. **Betts**, A. K., R. Desjardins, D. Worth and B. Beckage, 2015: Climate coupling between temperature, humidity, precipitation and cloud cover over the Canadian Prairies. *J. Geophys. Res. Atmos.* 119, 13305-13326, doi:10.1002/2014JD022511.
41. **Betts**, A.K., R. Desjardins, A.C.M. Beljaars and A. **Tawfik**, 2015: Observational study of land-surface-cloud-atmosphere coupling on daily timescales. *Front. Earth Sci.* 3:13. <http://dx.doi.org/10.3389/feart.2015.00013>
42. **Bombardi**, R. J., **E. K. Schneider**, **L. Marx**, **S. Halder**, **B. Singh**, **A. B. Tawfik**, **P. A. Dirmeyer**, **J. L. Kinter III**, 2015: Improvements in the representation of the Indian Summer Monsoon in the NCEP Climate Forecast System version 2. *Climate Dyn.* (online) doi 10.1007/s00382-015-2484-6.
43. **Bombardi**, R., **J. Zhu**, **L. Marx**, **B. Huang**, **H. Chen**, **J. Lu**, **L. Krishnamurthy**, **V. Krishnamurthy**, **I. Colfescu**, **J. L. Kinter III**, A. Kumar, Z.-Z. Hu, S. Moorthi., P. Tripp, X. Wu, and **E. K. Schneider**, 2015: Evaluation of the CFSv2 CMIP5 Decadal Predictions. *Climate Dyn.*, 44, 543-557.
44. Brierley, C., **N. Burls**, C., Ravelo and A. Fedorov, 2015: Pliocene warmth and gradients, *Nature Geoscience*, 8 (6), 419-420, doi:10.1038/ngeo2444.
45. **Buckley**, **M.W.**, R.M. Ponte, G. Forget, and P. Heimbach (2015). Determining the origins of advective heat transport convergence variability in the North Atlantic. *J. Climate*. 28, 3943—3956.
46. **Cash**, BA, **Kinter** JL, **Adams** JM, **Altshuler** EL, **Huang** B, Jin EK, **Manganello** J, **Marx** L, Jung T, 2015: Regional Structure of the Indian Summer Monsoon in Observations and Simulation. *J. Climate*, 28, 1824–1841, doi: <http://dx.doi.org/10.1175/JCLI-D-14-00292.1>
47. Chen, H.-C., C.-H. Sui, Y.-H. Tseng, and **B. Huang**, 2015: An Analysis of the Linkage of Pacific Subtropical Cells with the Recharge–Discharge Processes in ENSO Evolution. *J. Climate*, 28, 3786–3805.

## COLA REFEREED PUBLICATIONS 1993-Present

---

48. **Chen, L.** and O. W. Frauenfeld, 2015: Impacts of urbanization on future climate in China. *Climate Dynamics*, 47, 345-357, doi: 10.1007/s00382-015-2840-6.
49. **DelSole, T.**, and M. K. Tippett, 2015: Forecast Comparison Based on Random Walks, *Mon. Wea. Rev.*, **144**, 615-626
50. **DelSole, T.**, and M. K. Tippett, 2015: Laplacian Eigenfunctions for Climate Analysis, *J. Climate*, **28**, 7420-7436.
51. **DelSole, T.**, M. K. Tippett, and L. **Jia**, 2015: Multi-year Prediction and Predictability. In World Scientific Series on Asia-Pacific Weather and Climate: Volume 6 – Climate Change: Multidecadal and Beyond (eds., Chang, Ghil, Latif, Wallace), World Scientific (Singapore), ISBN: 978-981-4579-92-6.
52. **DelSole, T.**, C. Monteleoni, S. McQuade, M. K. Tippett, **K. Pegion**, and **J. Shukla**, 2015: Tracking Seasonal Prediction Models, submitted to *Machine Learning and Data Mining Approaches to Climate Science: Proceedings of the 5<sup>th</sup> International Workshop on Climate Informatics*
53. Ding H, Greatbatch RJ, Lu J, **Cash BA**, 2015: The East Asian Summer Monsoon in Pacemaker Experiments Driven by ENSO. *Ocean Dynamics*, 65, 385–393, DOI 10.1007/s10236-014-0795-5.
54. Fedorov, A.V., **Burls N.J.**, Lawrence K.T., and Peterson L.C., 2015: Tightly linked ocean zonal and meridional temperature gradients over the past 5 million years, *Nature Geoscience*, 8, 975–980, doi:10.1038/ngeo2577.
55. **Garuba, O. A.**, and **B. A. Klinger**, 2016: Ocean heat uptake and interbasin transport of passive and redistributive surface heating, *J. Clim.*, 29, 7507-7527
56. **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.
57. **Hazra, A.**, and V. **Krishnamurthy**, 2015: Space-time structure of diabatic heating in monsoon intraseasonal oscillation. *J. Climate*, 28, 2234–2255, doi: http://dx.doi.org/10.1175/JCLI-D-14-00280.1
58. **Huang, B.**, J. **Zhu**, L. **Marx**, X. Wu, A. Kumar, Z.-Z. Hu, M. Balmaseda, S. Zhang, J. Lu, E. K. **Schneider**, J. L. **Kinter III**, 2015: Climate Drift of AMOC, North Atlantic Salinity and Arctic Sea Ice in CFSv2 Decadal Predictions, *Climate Dyn.*, 44, 559-583.
59. Jiang, X., D. E. Waliser, P. K. Xavier, J. Petch, N. P. Klingaman, S. J. Woolnough, B. Guan, G. Bellon, T. Crueger, C. DeMott, C. Hannay, H. Lin, W. Hu, D. Kim, C. -L. Lappen, M. -M. Lu, H. -Y. Ma, T. Miyakawa, J. A. Ridout, S. D. Schubert, J. Sinocca, K. -H. Seo, E. Shindo, X. Song, **C. Stan**, W. -L. Tseng, W. Wang, T. Wu, X. Wu, K. Wyser, G. J. Zhang, and H. Zu, 2015: Vertical structure and physical processes of the Madden-Julian Oscillation: Exploring key model physics in climate simulations. *J. Geophys. Res.*, doi:10.1002/2014JD022375
60. Jin, Y., and **C. Stan**, 2016: Simulation of East Asian Summer Monsoon (EASM) in SP-CCSM4---Part I: Seasonal mean state and intraseasonal variability. *J. Geophys. Res.*, **121**, 7801-7818, doi:10.1002/2015JD024035.2015
61. **Krishnamurthy, L.**, and V. **Krishnamurthy**, 2015a: Decadal and interannual variability of the Indian Ocean, *Climate Dyn.*, *Climate Dyn.*, (published online) doi: 10.1007/s00382-015-2568-3.
62. **Krishnamurthy, L.**, and V. **Krishnamurthy**, 2015c: Teleconnections of Indian Monsoon Rainfall with AMO and Atlantic Tripole. *Climate Dyn.* (published online), doi: 10.1007/s00382-015-2701-3.
63. **Krishnamurthy, V.**, and **C. Stan**, 2015: Simulation of the South American climate by a coupled model with super-parameterized convection. *Climate Dyn.*, doi:10.1007/s00382-015-2476-6.
64. 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.*, doi: 10.1002/2015GL066858.

## COLA REFEREED PUBLICATIONS 1993-Present

---

65. **Manganello**, J. V., K. I. Hodges, B. A. **Cash**, J. L. **Kinter** III, E. L. **Altshuler**, M. J. **Fennessy**, F. Vitart, F. Molteni, and P. Towers, 2015: Seasonal Forecasts of Tropical Cyclone Activity in a High Atmospheric Resolution Coupled Prediction System. *J. Climate*, **29**, 1179-1200,
66. 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.
67. **Shin**, C.-S. and B. **Huang**, 2015: Slow and fast annual cycles of the Asian Summer Monsoon in the NCEP CFSv2. *Clim. Dyn.*, (online first), DOI:10.1007/s00382-015-2854-0.
68. **Shukla**, R., and B. **Huang**, 2015: Mean state and interannual variability of the Indian summer monsoon in NCEP CFSv2. *Clim. Dyn.*, (online first), DOI: 10.1007/s00382-015-2808-6.
69. **Shukla**, R., and B. **Huang**, 2015 Interannual variability of the Indian summer monsoon associated with the air-sea feedback in the northern Indian Ocean. **Climate Dynamics**. DOI: 10.1007/s00382-015-2687-x.
70. **Swenson**, E. T., 2015: Continuum Power CCA: A unified approach for isolating coupled modes. *J. Climate*, **28**, 1016-1030, doi: <http://dx.doi.org/10.1175/JCLI-D-14-00451.1>
71. **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.
72. **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.
73. **Trenary**, L., T. **DelSole**, M. K. Tippett, and B. **Doty**, 2015: Was the Cold Eastern US Winter of 2014 Due to Increased Variability? *Bull. Amer. Meteor. Soc.*, **96**, S15-S19
74. **Zhu**, J., B. **Huang**, B. **Cash**, J. L. **Kinter** III, J. **Manganello**, R. **Barimalala**, E. **Altshuler**, F. Vitart, F. Molteni, P. Towers, 2015: ENSO Prediction in Project Minerva: Sensitivity to Atmospheric Horizontal Resolution and Ensemble Size. *J. Climate*, **28**, 2080-2095.
75. **Zhu**, J., B. **Huang**, R.-H. Zhang, Z.-Z. Hu, A. Kumar, M. Balmaseda, J. L. **Kinter** III, 2015 The Role of Off-Equatorial Surface Temperature Anomalies in the 2014 El Nino Prediction. *Nature Sci. Rep.*, **4**, 6821. doi:10.1038/srep06821
76. **Zhu**, J., B. **Huang**, A. Kumar, J. L. **Kinter** III, 2015: Seasonality in Prediction Skill and Predictable Pattern of Tropical Indian Ocean SST. *J. Climate*, **28**, 7962-7984.
77. **Zhu**, J., A. Kumar, and B. **Huang**, 2015: The relationship between thermocline depth and SST anomalies in the eastern equatorial Pacific: seasonality and decadal variations. *Geophys. Res. Letter*, **42**, 4507-4515, doi:10.1002/2015GL064220.
78. **Zhu**, J., A. Kumar, H. Wang, and B. **Huang**, 2015: Sea surface temperature predictions in NCEP CFSv2 using a simple ocean initialization scheme. *Mon. Wea. Rev.*, **143**, 3176-3191.
79. **Zhu**, X. and **C. Stan**, 2015: Projection of summer precipitation over southeastern U.S. in the super-parameterized CCSM4. *J. Climate*, **28**, 8052-8066, doi:10.1175/JCLI-D-14-00765.1

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2014:

1. **Bombardi, R., J. Zhu, L. Marx, B. Huang, H. Chen, J. Lu, L. Krishnamurthy, V. Krishnamurthy, I. Colfescu, J. L. Kinter III, A. Kumar, Z.-Z. Hu, S. Moorthi., P. Tripp, X. Wu, and E. K. Schneider**, 2014: Evaluation of the CFSv2 CMIP5 Decadal Predictions. *Climate Dyn.*, submitted.
2. **Cash, B., J. L. Kinter III, J. Adams, E. Altshuler, B. Huang, E. Jin, J. Manganello, L. Marx, T. Jung**, 2014: Regional Structure of the Indian Monsoon in Observations, Reanalysis, and Simulation. *J. Climate* (submitted).
3. **Cash, B. A., M. Pascual, M. Emch, Md. Yunus**, 2014: Links between flooding, cholera, and shigellosis in Bangladesh. *PLoS One* (in revision).
4. **Chen, H.-C., C.-H. Sui, Y.-H. Tseng, and B. Huang**, 2014: An analysis of climate oscillations in Pacific subtropical cells. *J. Climate*, submitted.
5. **Cooke, M. A., E. Demirov, and J. Zhu**, 2014: A model study of the relationship between sea-ice variability and surface and intermediate water mass properties in the Labrador Sea. *Atmosphere-Ocean*, **52**, 142-154.
6. **DelSole, T., M. K. Tippett, and L. Jia**, 2014: Multi-year Prediction and Predictability. To appear in *World Scientific Series on Weather and Climate*.
7. **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.
8. **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.
9. **Dirmeyer, P. A., Z. Wang, M. J. Mbuh 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.
10. **Gao, Z., Z.-Z. Hu, B. Jha, S. Yang, J. Zhu, B. Shen, and R. Zhang**, 2014: Variability and Predictability of Northeast China Climate during 1948-2012. *Climate Dyn.* (published online). DOI: 10.1007/s00382-013-1944-0.
11. **Gao, Z., Z.-Z. Hu, J. Zhu, S. Yang, R.-H. Zhang, Z. Xiao and B. Jha**, 2014: Variability and Prediction of Summer Rainfall in Northeast China. *J. Climate* (submitted).
12. **Guan, Y., B. Huang, J. Zhu, Z.-Z. Hu, J. L. Kinter III**, 2014: Interannual Variability of the South Pacific Ocean in Observations and Simulated by the NCEP Climate Forecast System, version 2. *Climate Dyn.*, (<http://dx.doi.org/10.1007/s00382-014-2148-y>).
13. **Guan, Y., J. Zhu, B. Huang, Z.-Z. Hu, J. L. Kinter III**, 2014: South Pacific Ocean Dipole: A Predictable Mode on Multiseasonal Time Scales. *J. Climate*, **27**, 1648-1658.
14. **Hauser, T., E. Demirov, J. Zhu, and I. Yashayaev**, 2014: North Atlantic atmospheric and ocean inter-annual variability over the past fifty years - dominant patterns and decadal shifts. *Progress in Oceanography* (submitted).
15. **Hazra, A., V. Krishnamurthy**, 2014: Space-time structure of diabatic heating in monsoon intraseasonal oscillation. *J. Climate* (submitted).
16. **Hu, Z.-Z., A. Kumar, B. Huang, J. Zhu, and Y. Guan**, 2014: Prediction skill of North Pacific variability in NCEP Climate Forecast System Version 2: Impact of ENSO and beyond. *J. Climate* (published online). doi: 10.1175/JCLI-D-13-00633.1.



## COLA REFEREED PUBLICATIONS 1993-Present

---

17. Hu, Z.-Z., A. Kumar, B. **Huang**, J. **Zhu**, and R.-H. Zhang, 2014: Asymmetric evolution of El Niño and La Niña: The recharge/discharge processes and meridional gradient. *Climate Dyn.* (submitted).
18. **Huang**, B., J. **Zhu**, L. **Marx**, X. Wu, A. Kumar, Z.-Z. Hu, M. Balmaseda, S. Zhang, J. Lu, E. K. **Schneider**, J. L. **Kinter** III, 2014: Climate Drift of AMOC, North Atlantic Salinity and Arctic Sea Ice in CFSv2 Decadal Predictions, *Climate Dyn.* (submitted).
19. Jia, L., T. **DelSole**, and M. K. Tippett, 2014: Can optimal projection improve dynamical model forecasts? *J. Climate*, 27, 2643–2655.
20. Jin, L., J. **Zhu**, Y. Huang, H.-S. Zhao, K.-P. Lin, and J. Jin, 2014: Nonlinear Statistical Ensemble Model for Rainfall Short-range Prediction. *Theor. Appl. Climatol.* (published online). DOI 10.1007/s00704-014-1161-8.
21. **Krishnamurthy**, L., and V. **Krishnamurthy**, 2014: Teleconnections of AMO and Atlantic Tripole with the Indian Monsoon Rainfall. *J. Geophys. Res.* (submitted).
22. **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.*, (in review).
23. **Kumar**, S., D. M. Lawrence, P. A. **Dirmeyer** and J. Sheffield, 2014: Less reliable water availability in the 21st century climate projections. *Earth's Future*, 1, doi: 10.1002/2013EF000159.
24. **Manganello**, J. V., K. I. Hodges, B. **Dirmeyer**, J. L. **Kinter** III, B. A. **Cash**, L. **Marx**, T. Jung, D. **Achuthavarier**, J. M. **Adams**, E. L. **Altshuler**, B. **Huang**, E. K. Jin, P. Towers, N. Wedi, 2014: Future Changes in the Western North Pacific Tropical Cyclone Activity Projected by a Multi-Decadal Simulation with a 16-km Global Atmospheric GCM. *J. Climate* (submitted).
25. Meehl G. A., L. Goddard, G. Boer, R. Burgman, G. Branstator, C. Cassou, S. Corti, G. Danabasoglu, F. Doblas-Reyes, E. Hawkins, A. Karspeck, M. Kimoto, A. Kumar, D. Matei, J. Mignot, R. Msadek, H. Pohlmann, M. Rienecker, T. Rosati, E. **Schneider**, D. Smith, R. Sutton, H. Teng, G. J. van Oldenborgh, G. Vecchi, S. Yeager, 2014: Decadal Climate Prediction: An Update from the Trenches. *Bull. Amer. Meteor. Soc.*, 95, 243–267.
26. **Narapusetty**, B. C. **Stan**, and A. Kumar, 2014: Bias corrections methods for decadal sea-surface temperature forecasts. *Tellus*, 66, 23681, doi:10.3402/tellusa.v66.23681
27. **Shukla**, R. P., 2014: The dominant intraseasonal mode of intraseasonal South Asian summer monsoon. *J. Geophys. Res.*, **119**, 635–651, doi: 10.1002/2013JD020335
28. **Shukla**, R. P. and J. L. **Kinter** III, 2014: Simulations of the Asian Monsoon Using a Regionally Coupled-Global Model. *Climate Dyn.* (in press) doi: 10.1007/s00382-014-2188-3
29. **Shukla**, R. P., S. Rai and A. C Pandey, 2013: Southern and tropical Indian Ocean SST: A possible predictor of winter monsoon rainfall over South India. *Atmos. Climate Sci.*, 3, 440-449.
30. **Shukla**, R., and J. **Zhu**, 2014: Simulations of boreal summer intraseasonal oscillation with CFSv2 over India and western Pacific: role of air-sea coupling. *Atmosphere-Ocean* (accepted).
31. **Straus**, D. M., E. Swenson and C.-L., Lappen, 2014: The MJO Cycle Forcing of the North Atlantic Circulation: Intervention Experiments with the Community Earth System Model. *J. Atmos. Sci.*, (submitted).

## COLA REFEREED PUBLICATIONS 1993-Present

---

32. 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.*, 11, 2583-2612, doi: 10.5194/hessd-11-2583-2014.
33. **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.
34. Zhang, R.-H., Z. Li, J. **Zhu**, X. Kang, J. Min, 2014: Impact of Tropical Instability Waves-induced SST Forcing on the Atmosphere in the Tropical Pacific, Evaluated Using CAM5.1. *Atmos. Sci. Lett. (published online)*. DOI: 10.1002/asl2.488.
35. **Zhu**, J., E. Demirov, Y. Zhang, and A. M. Polomska-Harlick, 2014: Model simulations of mesoscale eddies and deep convection in the Labrador Sea. *Adv. Atmos. Sci.*, **31**, 743-754. doi:10.1007/s00376-013-3107-y.
36. **Zhu**, J., B. **Huang**, B. **Cash**, J. L. **Kinter** III, J. **Manganello**, R. **Barimalala**, E. **Altshuler**, F. Vitart, F. Molteni, P. Towers, 2014: ENSO prediction in Project Minerva: Sensitivity to Atmospheric Horizontal Resolution and Ensemble Size. *J. Climate* (submitted).
37. **Zhu**, J., B. **Huang**, R.-H. Zhang, Z.-Z. Hu, A. Kumar, M. Balmaseda, J. L. **Kinter** III, 2014: Salinity Anomaly as a Trigger for ENSO Events. (in preparation).

### 2013:

1. 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.
2. Cai, M., and **B. Huang**, 2013a: A new look at the physics of Rossby Waves: A mechanical-Coriolis oscillation. *J. Atmos. Sci.*, **70**, 303-316.
3. Cai, M., and **B. Huang**, 2013b: A dissection of energetics of the geostrophic flow: reconciliation of Rossby wave energy flux and group velocity. *J. Atmos. Sci.*, **70**, 2179-2196.
4. **Cash**, B. A., X. Rodó, J. Ballester, M. Bouma, R. Dhiman and M. Pascual, 2013: Malaria epidemics highlight influence of the Tropical South Atlantic on the Indian monsoons. *Nature Climate Change* doi:doi:10.1038/nclimate1834.
5. Chen, G., J. **Lu**, and L. Sun, 2013: Delineating the eddy-zonal flow interaction in the atmospheric circulation response to climate forcing: Uniform SST warming in an idealized aqua-planet model. *J. Atmos. Sci.*, doi: dx.doi.org/10.1175/JAS-D-12-0248.1 (early online release).
6. **Chen**, H., 2013: Mechanisms of the internally generated decadal-to-multidecadal variability in the Atlantic. *Ph.D. Dissertation*, George Mason University.
7. **Chen**, H. and E. K. **Schneider**, 2013: Comparison of the SST forced responses between coupled and uncoupled climate simulations. *J. Climate*, published online, DOI: 10.1175/JCLI-D-13-00092.1.
8. **Chen**, H., E. K. **Schneider**, B. P. Kirtman, and I. **Colfescu**, 2013: Evaluation of weather noise and its role in climate model simulations. *J. Climate*, 26, 3766-3784, DOI: 10.1175/JCLI-D-12-00292.1.
9. **Colfescu**, I., E. K. **Schneider**, and H. **Chen**, 2013: Consistency of 20th century sea level pressure trends as simulated by a coupled and uncoupled GCM. *Geophys. Res. Lett.*, 40, 3276-

## COLA REFEREED PUBLICATIONS 1993-Present

---

- 3280, DOI: 10.1002/grl.50545.
10. **DelSole**, T. and X. Feng, 2013. The “Shukla-Gutzler” method for estimating potential seasonal predictability. *Mon. Wea. Rev.*, **141**, 822–831.
  11. **DelSole**, T., L. Jia, and M. K. Tippett, 2013a: Decadal prediction of observed and simulated sea surface temperatures. *Geophys. Res. Lett.*, **40**, 2773–2778.
  12. **DelSole**, T., L. Jia, and M. K. Tippett, 2013b: Scale-selective ridge regression for multimodel forecasting. *J. Climate*, **26**, 7957–7965.
  13. **DelSole**, T., A. Kumar, and B. Jha, 2013c: Potential seasonal predictability: Comparison between empirical and dynamical model estimates. *Geophys. Res. Lett.*, **40**, 3200–3206.
  14. **DelSole**, T., X. Yan, P. A. **Dirmeyer**, M. **Fennessy**, and E. **Altshuler**, 2013d: Changes in seasonal predictability due to global warming. *J. Climate*, **27**, 300–311.
  15. **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.
  16. **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.
  17. **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.
  18. **Dirmeyer**, P. A., S. **Kumar**, M. J. **Fennessy**, E. L. **Altshuler**, T. **DelSole**, Z. **Guo**, B. **Cash** and D. **Straus**, 2013: Evolution of land-driven predictability in a changing climate. *J. Climate*, **26**, 8495–8512, doi:10.1175/JCLI-D-13-00029.1.
  19. Feng X., T. **DelSole**, and P. Houser, 2013. Comparison of statistical estimates of potential seasonal predictability. *J. Geophys. Res.*, **118**, 6002–6016.
  20. **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.
  21. **Hazra**, A., and V. **Krishnamurthy**, 2014: Space-time structure of diabatic heating in monsoon intraseasonal oscillation, *J. Climate* (in review).
  22. Hu, Z.-Z., A. Kumar, B. **Huang** and J. **Zhu**, 2013: Leading Modes of the Upper Ocean Temperature Interannual Variability along the Equatorial Atlantic Ocean in NCEP GODAS. *J. Climate*, **26**, 4649–4663, doi:10.1175/JCLI-D-12-00629.1.
  23. Hu, Z.-Z., A. Kumar, B. **Huang**, W. Wang, J. **Zhu**, and C. Wen, 2013: Prediction skill of monthly SST in the North Atlantic Ocean in NCEP Climate Forecast System Version 2. *Climate Dyn.* **40**, 2745–2756. DOI: 10.1007/s00382-012-1431-z.
  24. **Jang**, Y., D. M. **Straus**, 2013: Tropical Stationary Wave Response to ENSO: Diabatic Heating Influence on the Indian Summer Monsoon. *J. Atmos. Sci.*, **70**, 193–222.
  25. **Kinter III**, J. L., B. **Cash**, D. **Achuthavarier**, J. **Adams**, E. **Altshuler**, P. **Dirmeyer**, B. **Doty**, 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, M. Ezell, 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.

## COLA REFEREED PUBLICATIONS 1993-Present

---

26. Kirtman, B., D. Min, J. M. Infanti, J. L. **Kinter** III, D. A. **Paolino**, Q. Zhang, H. van den Dool, S. Saha, M. Pena Mendez, E. Becker, P. Peng, P. Tripp, J. Huang, D. G. DeWitt; M. K. Tippett, A. G. Barnston, S. Li, S. D. Schubert, M. Rienecker, M. Suarez, Z. E. Li, J. Marshak, Y.-K. Lim, J. Tribbia, K. Pegion, W. J. Merryfield, B. Denis, E. F. Wood, 2013: The US National Multi-Model Ensemble for Intra-seasonal to Interannual Prediction. *Bull. Amer. Meteor. Soc.* <http://dx.doi.org/10.1175/BAMS-D-12-00050.1>.
27. **Krishnamurthy**, L., and V. **Krishnamurthy**, 2013a: Decadal scale oscillations and trend in the Indian monsoon rainfall. *Clim. Dyn.* doi: 10.1007/s00382-013-1870-1.
28. **Krishnamurthy**, L., and V. **Krishnamurthy**, 2013b: Influence of PDO on South Asian summer monsoon and ENSO-monsoon relation. *Clim. Dyn.* doi:10.1007/s00382-013-1856-z.
29. **Krishnamurthy**, V., and C. **Stan**, 2013: South American monsoon system in a coupled model with super-parameterized convection. *Clim. Dyn.* (in review).
30. **Krishnamurthy**, V., C. **Stan**, D. A. Randall, R. P. **Shukla**, and J. L. **Kinter** III, 2013: Simulation of the South Asian monsoon in a coupled model with an embedded cloud resolving model. *J. Climate* <http://dx.doi.org/10.1175/JCLI-D-13-00257.1>.
31. **Kumar**, S., P. A. **Dirmeyer**, V. Merwade, T. **DelSole**, J. M. **Adams**, and D. Niyogi, 2013a: Land use/cover change impacts in CMIP5 climate simulations– A new methodology and 21st century challenges. *J. Geophys. Res. Atmos.*, **118**, 6337–6353.
32. **Kumar**, S., J. L. **Kinter** III, P. A. **Dirmeyer**, Z. Pan, J. **Adams**, 2013b: Multidecadal Climate Variability and the “Warming Hole” in North America: Results from CMIP5 Twentieth- and Twenty-First-Century Climate Simulations. *J. Climate*, **26**, 3511–3527.
33. **Kumar** S., V. Merwade D. Niyogi, J. L. **Kinter** III, 2013c: Evaluation of Temperature and Precipitation Trends and long-term Persistence in CMIP5 20<sup>th</sup> Century Climate Simulations. *J. Climate*, **26**, 4168–4185. doi:<http://dx.doi.org/10.1175/JCLI-D-12-00259.1>.
34. 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 2013: Land cover changes and their biogeophysical effects on climate. *Int. J. Climatol.*, doi: 10.1002/joc.3736, (early release).
35. Maloney, E. D., S. J. Camargo, E. Chang, B. Colle, R. Fu, K. L. Geils, Q. Hu, X. Jiang, N. Johnson, K. Karnauskas, J. L. **Kinter** III, B. Kirtman, S. **Kumar**, B. Langenbrunner, K. Lombardo, L. N. Long, A. Mariotti, J. E. Meyerson, K. C. Mo, J. D. Neelin, Z. Pan, R. Seager, Y. Serra, A. Seth, J. Sheffield, J. Stroeve, J. Thibeault, C. Wang, B. Wyman, S.-P. Xie, and M. Zhao, 2013: North American Climate in CMIP5 Experiments: Part III: Assessment of 21<sup>st</sup> Century Projections. *J. Climate*, **27**, 2230–2270.
36. Miyamoto, Y., M. Satoh, H. Tomita and J. L. **Kinter** III, 2013: Gradient Wind Balance in Tropical Cyclones in global nonhydrostatic model simulations. *Mon. Wea. Rev.*, **142**, 1908–1926.
37. 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: Benchmarking products for land evapotranspiration: LandFlux-EVAL multi-datasets synthesis. *Hydrol. Earth Sys. Sci.*, doi:10.5194/hessd-10-769-2013.
38. **Nattala**, J., 2013: El Niño and the Southern Oscillation in Parameterized and Super-Parameterized Coupled General Circulation Models. *Ph.D. Dissertation*, George Mason

## COLA REFEREED PUBLICATIONS 1993-Present

---

- University.
39. **Palipane**, E., J. **Lu**, G. Chen, J. L. **Kinter** III, 2013: Improved Annular Mode Variability in a Global Atmospheric Model with 16-km Horizontal Resolution. *Geophys. Res. Lett.* 40, 4893–4899, doi:10.1002/grl.50649.
  40. Pan, Z., X. Liu, S. **Kumar**, Z. Gao and J. L. **Kinter** III, 2013: Inter-model variability and mechanism attribution of central and southeastern U.S. anomalous cooling in the 20<sup>th</sup> century as simulated by CMIP5 models. *J. Climate*, 26, 6215-6237. doi: 10.1175/JCLI-D-12-00559.1
  41. Rodo, X., M. Pascual, F. J. Doblas-Reyes, A. Gershunov, D. A. Stone, F. Giorgi, P. J. Hudson, J. L. **Kinter** III, M.-A. Rodriguez-Arias, N. C. Stenseth, A. P. Dobson, 2013: Climate Change and Infectious Diseases: Can We Meet the Needs for Better Prediction? *Climatic Change*, 118, 625-640. doi: 10.1007/10584-013-0744-1.
  42. Sheffield, J., S. J. Camargo, R. Fu, Q. Hu, X. Jiang, N. Johnson, K. Karnauskas, J. L. **Kinter** III, S. **Kumar**, B. Langenbrunner, E. Maloney, A. Mariotti, J. E. Meyerson, D. Neelin, Z. Pan, A. Ruiz-Barradas, R. Seager, Y. L. Serra, D.-Z. Sun, C. Wang, S.-P. Xie, J.-Y. Yu, T. Zhang, and M. Zhao, 2013: North American Climate in CMIP5 Experiments. Part II: Evaluation of 20<sup>th</sup> Century Intra-Seasonal to Decadal Variability. *J. Climate*, 26, 9247-9290.
  43. Sheffield, J., A. Barrett, B. Colle, R. Fu, K. L. Geils, Q. Hu, J. L. **Kinter** III, S. **Kumar**, B. Langenbrunner, K. Lombardo, L. N. Long, E. Maloney, A. Mariotti, J. E. Meyerson, K. C. Mo, D. Neelin, Z. Pan, A. Ruiz-Barradas, Y. L. Serra, A. Seth, J. M. Thibeault, J. C. Stroeve, 2013: North American Climate in CMIP5 Experiments. Part I: Evaluation of 20<sup>th</sup> Century Continental and Regional Climatology. *J. Climate*, 26, 9209-9245.
  44. **Shukla**, R. P., S. Rai and A. C. Pandey, 2013: Southern and tropical Indian Ocean SST: A possible predictor of winter monsoon rainfall over South India. *Atmos. Climate Sci.*, 3, 440-449.
  45. Sun, L., G. Chen and J. **Lu**, 2013: Sensitivities and mechanism of the zonal mean atmospheric circulation response to tropical warming. *J. Atmos. Sci.*, doi: dx.doi.org/10.1175/JAS-D-12-2098.1 (early online release).
  46. Tippett, M. K. and T. **DelSole**, 2013: Constructed analogues and linear regression. *Mon. Wea. Rev.*, 141, 2519–2525.
  47. Wallace, J. M., J. **Shukla**, B. Hoskins, G. North, L. Bengtsson, J. L. **Kinter** III, E. Sarachik, B. N. Goswami, and S. Rayner, 2013: Scientific Context for Human-Induced Climate Change: Summary Report of a Workshop International Centre for Theoretical Physics, Trieste, Italy August 6-7 2012. *Eos Trans. Amer. Geophys. Soc.* (submitted).
  48. **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.
  49. **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.
  50. **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.
  51. Yang, X., A. Rosati, S. Zhang, T. L. Delworth, R. G. Gudgel, R. Zhang, G. Vecchi, W. Anderson, Y.-S. Chang, T. **DelSole**, K. Dixon, R. Msadec, W. F. Stern, A. Wittenberg, and F. Zeng, 2013. A predictable AMO-like pattern in GFDL's fully-coupled ensemble initialization and decadal forecasting system. *J. Climate*, 26, 650–661.

## COLA REFEREED PUBLICATIONS 1993-Present

---

52. Zhang, S., M. Winton, A. Rosati, T. Delworth, and **B. Huang**, 2013: Impact of enthalpy-based ensemble filtering sea ice data assimilation on decadal predictions: simulation with a conceptual pycnocline prediction model. *J. Climate*, **26**, 2368-2378.
53. **Zhu**, J., **B. Huang**, M. Balmaseda, J. L. **Kinter** III, P. Peng, Z.-Z. Hu, and L. **Marx**, 2013: Improved reliability of ENSO hindcasts with multi-ocean analyses ensemble initialization. *Climate Dyn.*, **41**, 2785-2795.
54. **Zhu**, J., **B. Huang**, Z.-Z. Hu, J. L. **Kinter** III, L. **Marx**, 2013: Predicting US Summer Precipitation using NCEP Climate Forecast System Version 2 initialized by Multiple Ocean Analyses. *Climate Dyn.*, **41**, 19141-1954.
55. **Zhu**, J., and J. **Shukla**, 2013: The role of air-sea coupling in seasonal prediction of Asian-Pacific summer monsoon rainfall. *J. Climate*, **26**, 5689-5697, doi: 10.1175/JCLI-D-13-00190.1.
56. **Zhu**, J., G.-Q. Zhou, R.-H. Zhang, and Z. Sun, 2013: Improving ENSO Prediction in a Hybrid Coupled Model with an Embedded Entrainment Temperature Parameterization. *Int. J. of Climatol.* **33**, 343-355, DOI: 10.1002/joc.3426.
57. Zuo, Z., S. Yang, Z.-Z. Hu, R. Zhang, W. Wang, **B. Huang** and F. Wang, 2013: Predictable patterns and predictive skills of monsoon precipitation in Northern Hemisphere summer in NCEP CFSv2 reforecasts. *Climate Dyn.*, **40**, 3071-3088, DOI 10.1007/s00382-013-1772-2.

### 2012:

58. **Achuthavarier**, D., V. **Krishnamurthy**, B. P. Kirtman, and **B. Huang**, 2012: Role of Indian Ocean in the ENSO-Indian summer monsoon teleconnection in the NCEP Climate Forecast System. *J. Climate*, **25**, 2490-2508.
59. 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.
60. Bao, Z., Kelly, R. and **Wu**, R., 2011: Variability of regional snow cover in spring over western Canada and its relationship to temperature and circulation anomalies. *Int. J. Climatol.*, **31**: 1280-1294. doi: 10.1002/joc.2155
61. **DelSole**, T. and J. **Shukla**, 2012: Climate models produce skillful predictions of Indian summer monsoon rainfall. *Geophys. Res. Lett.*, **39**, L09 703, doi:10.1029/2012GL051 279.
62. **DelSole**, T., X. **Yang**, and M. K. Tippett, 2012: Is unequal weighting significantly better than equal weighting for multi-model forecasting? *Quart. J. Roy. Meteor. Soc.* DOI:10.1002/qj.1961
63. **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 diurnal cycle of rainfall in global climate models: Resolution versus parameterization. *Climate Dyn.*, **39**, 399-418, doi: 10.1007/s00382-011-1127-9.
64. **Dirmeyer**, P. A., B. A. **Cash**, J. L. **Kinter** III, C. **Stan**, T. Jung, L. **Marx**, 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.
65. **Fan**, M. and E. K. **Schneider**, 2012: Observed decadal North Atlantic tripole SST variability. Part I: Weather noise forcing and coupled response. *J. Atmos. Sci.* **69**, 35-50.

## COLA REFEREED PUBLICATIONS 1993-Present

---

66. **Feng, X., T. DelSole,** and P. Houser, 2012: A Method for Estimating Potential Seasonal Predictability. Part I: Analysis of Covariance. *J. Climate*, 25, 5292-5308.
67. **Guo, Z., P. A. Dirmeyer,** and T. **DelSole,** 2012: Land Surface Impacts on Subseasonal and Seasonal Predictability. *Geophys. Res. Lett.*, **38**, doi:10.1029/2011GL049945.
68. **Guo, Z.-C., P. A. Dirmeyer,** T. **DeSole,** and R. D. Koster, 2012: Rebound in atmospheric predictability rebound and the role of land surface. *Journal of Climate*, 25, 4744-4749. DOI: 10.1175/JCLI-D-11-00651.1
69. Hu, Z.-Z., B. **Huang,** J. L. **Kinter III,** Z. Wu and A. Kumar, 2012: Connection of Stratospheric QBO with Global Atmospheric General Circulation and Tropical SST. Part II: Interdecadal Variations. *Climate Dyn.*, **18**, 25-43. DOI 10.1007/s00382-011-1073-6.
70. Hu, Z.-Z., B. **Huang,** J. L. **Kinter III,** Z. Wu and A. Kumar, 2012: Connection of Stratospheric QBO with Global Atmospheric General Circulation and Tropical SST. Part I: Methodology and Composite Life Cycle. *Climate Dyn.* 18, 1-23.
71. **Huang, B., Z.-Z. Hu, E.K. Schneider,** Z. Wu, Y. Xue, and B. **Klinger,** 2012: Influences of tropical-extratropical interaction on the multidecadal AMOC variability in the NCEP Climate Forecast System. *Clim. Dyn.*, 39, 531-555, DOI 10.1007/s00382-011-1258-z.
72. **Huang, B., Z.-Z. Hu, J. L. Kinter III,** Z. Wu, and A. Kumar, 2012: Connection of stratospheric QBO with global atmospheric general circulation and tropical SST. Part I: Methodology and composite life cycle. *Clim. Dyn.*, 38, 1-23, DOI 10.1007/s00382-011-1250-7.
73. **Jang, Y., D. M. Straus,** 2012: The Indian Monsoon Circulation Response to El Niño Diabatic Heating. *J. Climate*, 25, 7487-7508.
74. **Jia, L., T. DelSole,** 2012: Multi-year Predictability of Temperature and Precipitation Identified in Climate Models, *Geophys. Res. Lett.*, 39, doi:10.1029/2012GL052778.
75. **Jia, L.,** and T. **DelSole,** 2012: Optimal Determination of Time-Varying Climate Change Signals, *J. Climate*, 25, 7122-7137.
76. Kang, S. and **J. Lu,** 2012: Expansion of the Hadley cell under global warming: winter versus summer. *J. Climate*, 25, 8387-8393.
77. Kirtman, B. P., C. Bitz, F. Bryan, W. Collins, J. Dennis, N. Hearn, J. L. **Kinter III,** R. Loft, C. Rousset, L. Sequeira, C. **Stan,** R. Tomas, and M. Vertenstein, 2012: Impact of ocean model resolution on CCSM climate simulations. *Clim. Dyn.*, **39**, 1303-1328. doi:10.1007/s00382-012-1500-3.
78. **Krishnamurthy, L.,** 2012: Influence of Decadal Variability of Global Oceans on South Asian Monsoon and ENSO-Monsoon Relation. *Ph.D. Dissertation,* George Mason University.
79. **Krishnamurthy, V.,** 2012: Extreme events and trends in the Indian summer monsoon. Extreme events and natural hazards, *Geophysical Monograph* 196, eds., A. S. Sharma et al., 153-168, American Geophysical Union, Washington DC.
80. **Krishnamurthy, V.,** and D. **Achuthavarier,** 2012: Intraseasonal oscillations of the monsoon circulation over South Asia. *Climate Dyn.*, 38, 2335-2353.
81. **Krishnamurthy, V.,** and J. **Shukla,** 2012: Predictability of the Indian monsoon in coupled general circulation models. *Monsoon Monograph*, 2, eds., A. Tyagi et al., 266-306, India Meteorological Department, New Delhi.
82. Kumar, A., M. Chen, L. Zhang, W. Wang, Y. Xue, C. Wen, L. **Marx,** B. **Huang,** 2012: An Analysis of the Nonstationarity in the Bias of Sea Surface Temperature Forecasts for the NCEP Climate Forecast System (CFS) Version 2. *Mon. Wea. Rev.*, 140, 3003-3016.

## COLA REFEREED PUBLICATIONS 1993-Present

---

83. **Kumar S.**, V. Merwade, S. Rao, and B. C. Pijanowski, 2012: Characterizing Long-Term Land Use/Cover Change in the United States from 1850 to 2000 Using a Nonlinear Bi-analytical Model, *AMBIO*. DOI 10.1007/s13280-012-0354-6
84. **Lu J.** and B. Zhao, 2012: The role of oceanic feedback in the climate response to doubling CO<sub>2</sub>. *J. Climate*, 25, 7544-7563.
85. **Manganello**, J. V., K. I. Hodges, J. L. **Kinter III**, B. A. **Cash**, L. **Marx**, T. Jung, D. **Achuthavarier**, J. M. **Adams**, E. L. **Altshuler**, B. **Huang**, E. K. **Jin**, C. **Stan**, P. Towers and N. Wedi, 2012: Tropical Cyclone Climatology in a 10-km Global Atmospheric GCM: Toward Weather-Resolving Climate Modeling. *J. Climate* doi: <http://dx.doi.org/10.1175/JCLI-D-11-00346.1>.
86. Mesinger, F., K. Veljovic, M. J. **Fennessy**, and E. L. **Altshuler**, 2012: Value added in Regional Climate Modeling: Should One Aim to Improve on the Large Scale as Well?. *Climate Change, Inferences from Paleoclimate and Regional Aspects*. A. Berger, F. Mesinger and D. Sijacki Editors, Springer, 244 pp.
87. **Narapusetty**, B., C. **Stan**, B. P. Kirtman, L. **Marx**, and J. L. **Kinter III**, 2012: The role of atmospheric internal variability on the tropical instability wave dynamics. *J. Geophys. Res.* 117, doi:10.1029/2012JC007906. (in press)
88. **Paolino**, D.A., J. L. **Kinter III**, B. P. Kirtman, D. Min and D. M. **Straus**, 2012: The impact of land surface and atmospheric initialization on seasonal forecasts with CCSM. *J. Climate*, 25, 1007-1021.
89. **Schneider**, E. K. and M. **Fan**, 2012: Observed decadal North Atlantic tripole SST variability. Part II: Diagnosis of mechanisms. *J. Atmos. Sci.* 69, 51-64.
90. **Solomon**, A., G. Chen and J. **Lu**, 2012: Finite Amplitude Lagrangian-mean Wave Activity Diagnostics Applied to the Baroclinic Eddy Life-Cycle. *J. Atmos. Sci.*, doi: <http://dx.doi.org/10.1175/JAS-D-11-0294.1>
91. **Solomon**, A. and N. Nakamura, 2012: An Exact Lagrangian-Mean Wave Activity for Finite Amplitude Disturbances to Barotropic Flow on a Sphere. *J. Fluid Mech.* 693, 69-92 doi: <http://dx.doi.org/10.1017/jfm.2011.460>
92. **Stan**, C., 2012: Is cumulus convection the *concertmaster* of tropical cyclone activity? *Geophys. Res. Lett.*, doi:10.129/2012GL053449.
93. Staten, P., J. J. Rutz, T. Reichler, and J. **Lu**, 2012: Breaking down the tropospheric response by forcing. *Climate Dyn.* DOI-10.1007/s00382-011-1267-y.
94. **Swenson**, E., 2012: The Role of Sub-Seasonal Tropical Convective Variability for the Extratropical Response to ENSO. *Ph.D. Dissertation*, George Mason University.
95. Van den Hurk, B., M. Best, P. A. **Dirmeyer**, A. J. Pitman, J. Polcher and J. Santanello, 2012: 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.
96. **Wei**, J., and P. A. **Dirmeyer**, 2012: Dissecting soil moisture-precipitation coupling. *Geophys. Res. Lett.*, 39, L19711, doi:10.1029/2012GL053038.
97. **Wei**, J., P. A. **Dirmeyer**, M. G. Bosilovich, and R. **Wu**, 2012: Water vapor sources for Yangtze River Valley rainfall: Climatology, variability, and implications for rainfall forecasting, *J. Geophys. Res.*, 117, doi:10.1029/2011JD016902.
98. **Wu**, R., J.-L. Chen, and W. Chen, 2012a: Different types of ENSO influences on the Indian summer monsoon variability. *J. Climate*, 25, 903-920.
99. **Wu**, R., S. Yang, S. Liu, L. Sun, Y. Lian, and Z.-T. Gao, 2012b: Northeast China summer temperature and North Atlantic SST. *J. Geophys. Res.* 116, D16116, doi:10.1029/2011JD015779.



## COLA REFEREED PUBLICATIONS 1993-Present

---

100. Yang, X., and T. **DelSole**, 2012: Systematic Comparison of ENSO Teleconnection Patterns Between Models and Observations. *J. Climate*, 25, 425-446.
101. **Yilmaz**, M., T. **DelSole**, & P. R. Houser, 2012: Reducing water balance residuals in land data assimilation: Ensemble filtering without perturbed observations. *J. Hydrometeor*, **13**, 413-420.
102. Zhang, M., S. Li, **J. Lu**, and **R. Wu**, 2012a: Comparison of the Northwestern Pacific Summer Climate Simulated by Five AGCMs. *J. Climate* 25, 6036-6056.
103. Zhang, R.-H., F. Zheng, **J. Zhu**, Y. Pei, Q. Zheng, and Z. Wang, 2012b: Modulation of El Niño-Southern Oscillation by Freshwater Flux and Salinity Variability in the Tropical Pacific. *Adv. Atmos. Sci.*, 29, 647-660.
104. **Zhu**, J., **B. Huang** and M. Balmaseda, 2012: An ensemble estimation of the variability of upper-ocean heat content over the tropical Atlantic Ocean with multi-ocean reanalysis products. *Climate Dyn.*, 39, 1001-1020, DOI 10.1007/s00382-011-1189-8.
105. **Zhu**, J., **B. Huang**, **L. Marx**, **J. L. Kinter** III, M. A. Balmaseda, R.-H. Zhang, and Z.-Z. Hu, 2012: Ensemble ENSO hindcasts initialized from multiple ocean analyses. *Geophys. Res. Lett.*, 39, L09602, DOI:10.1029/2012GL051503.
106. **Zhu**, J., **B. Huang**, and Z. Wu, 2012: The role of ocean dynamics in the interaction between the Atlantic meridional and equatorial modes. *J. Climate*, 25, 3583-3598.
107. **Zhu**, J., G.-Q. Zhou, R.-H. Zhang, and Z. Sun, 2012: Improving ENSO Prediction in a Hybrid Coupled Model with an Embedded Entrainment Temperature Parameterization. *Int. J. Climatol.* DOI: 10.1002/joc.3426 (published online).

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2011:

108. **Achuthavarier**, D., and V. **Krishnamurthy**, 2011a: Role of Indian and Pacific SST in Indian Summer Monsoon Intraseasonal Variability. *J. Climate*, 24, 2915–2930.
109. **Achuthavarier**, D., and V. **Krishnamurthy**, 2011b: Daily modes of South Asian summer monsoon variability in the NCEP Climate Forecast System. *Climate Dyn.* 36, 1941-1958.
110. **Arsenault**, K. 2011: Impact of model and observation error on assimilating snow cover fraction observations. *Ph.D. Dissertation*, George Mason University.
111. Chang, E.-C., S.-W. Yeh, S.-Y. Hong, and R. **Wu**, 2011: The role of air-sea interaction over the Indian Ocean in the in-phase transition from the Indian summer monsoon to the Australian boreal winter monsoon. *J. Geophys. Res.*, 116, D01107, doi:10.1029/2010JD014522.
112. Chen, G., Y. Ming, N. Singer and J. **Lu**, 2011: Testing the Clausius-Clapeyron constraint on the aerosol-induced changes in mean and extreme precipitation. *Geophys. Res. Lett.*, 38, doi:10.1029/2010GL046435.
113. 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.
114. **DelSole**, T., M. K. Tippett, and J. **Shukla**, 2011a: A Significant Component of Unforced Multidecadal Variability in the Recent Acceleration of Global Warming. *J. Climate*, 24, 909-926.
115. **DelSole**, T., and X. **Yang**, 2011: Field Significance of Regression Patterns. *J. Climate*, 24, 5094–5107.
116. DeMott, C. A., D. A. Randall, C. **Stan**, J. L. **Kinter** III, and M. Khairoutdinov, 2011: The Asian Monsoon in the Super-Parameterized CCSM and its Relationship to Tropical Wave Activity. *J. Climate*, 24, 5134-5156. doi: 10.1175/2011JCLI4202.1.
117. **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.
118. **Dirmeyer**, P. A., 2011: The terrestrial segment of soil moisture-climate coupling. *Geophys. Res. Lett.*, 38, L16702, doi: 10.1029/2011GL048268.
119. **Dirmeyer**, P. A., T. **DelSole** and M. Zhao, 2011c: Limits to the impact of data assimilation on simulation of the water cycle. *J. Hydrometeor.*, 12, 147–156.
120. **Feng**, X., T. **DelSole**, and P. Houser, 2011a: Bootstrap Estimated Seasonal Potential Predictability of Global Temperature and Precipitation. *Geophys. Res. Lett.*, 38, L07702, doi:10.1029/2010GL046511.
121. **Fennessy**, M. J., and J. L. **Kinter** III, 2011: Climatic feedbacks during the 2003 European heatwave. *J. Climate*, (early release), doi: 10.1175/2011JCLI3523.1.
122. Gao, H., S. Yang, A. Kumar, Z.-Z. Hu, B. **Huang**, Y. Li, and B. Jha, 2011: Variations of the East Asian Mei-yu and simulations and prediction by the NCEP Climate Forecast System. *J. Climate*, 24, 94-108.
123. **Guo**, Z., P. A. **Dirmeyer** and T. **DelSole**, 2011a: Land surface impacts on subseasonal and seasonal predictability. *Geophys. Res. Lett.*, 38, L24812, doi:10.1029/2011GL049945.
124. Hu, Z.-Z., B. **Huang**, Y.-T. Hou, W. Wang, F. Yang, C. **Stan**, and E. K. **Schneider**, 2011a: Sensitivity of tropical mean climate to prescribed low-level clouds in the NCEP CFS. *Climate Dyn.*, 36, 1795-1811.

## COLA REFEREED PUBLICATIONS 1993-Present

---

125. Hu, Z.-Z., B. **Huang**, J. L. **Kinter** III, Z. Wu, and A. Kumar, 2011b: Connection of stratospheric QBO with global atmospheric general circulation and tropical SST. Part II: Interdecadal variations. *Climate Dyn.*, doi 10.1007/s00382-011-1073-6.
126. Hu, Z.-Z., A. Kumar, B. **Huang**, Y. Xue, and W. Wang, 2011c: Persistent oceanic anomalies in the North Atlantic from summer 2009 to spring 2010. *J. Climate*, 24, 5812-5830.
127. Hu, Z.-Z., A. Kumar, B. Jha, and B. **Huang**, 2011d: An analysis of forced and internal variability in a winter climate in CCSM3. *J. Climate*, DOI: 10.1175/JCLI-D-11-00323.1.
128. Hu, Z.-Z., A. Kumar, B. Jha, W. Wang, Bohua **Huang**, and Boyin Huang, 2011e: An analysis of warm pool and cold tongue El Niño events: coupled interactions, atmospheric response, and recent trends. *Climate Dyn.* doi: 10.1007/s00382-011-1073-6.
129. **Huang**, B., Z.-Z. Hu, J. L. **Kinter** III, Z. Wu and A. Kumar, 2011a: Connection of Stratospheric QBO with Global Atmospheric General Circulation and Tropical SST. Part I: Methodology and Composite Life Cycle. *Climate Dyn.* **18**, 1-23.
130. **Huang**, B., Z.-Z. Hu, E. K. **Schneider**, Z. Wu, Y. Xue, B. **Klinger**, 2011b: Influences of subtropical air-sea interaction on the multidecadal AMOC variability in the NCEP Climate Forecast System. *Climate Dyn.* doi: 10.1007/s00382-011-1258-z.
131. **Jang**, Y., 2011: The Atmospheric Influence of Tropical Diabatic Heating Associated with Developing ENSO on Indian Monsoon. *Ph.D. Dissertation*, George Mason University.
132. **Jia**, L., 2011: Robust Multi-Year Predictability on Continental Scales. *Ph.D. Dissertation*, George Mason University.
133. **Jia**, L. and T. **DelSole**, 2011a: Diagnosis of multi-year predictability on continental scales. *J. Climate*, 24, 5108–5124.
134. 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.
135. Jung, T., M. J. Miller, T. N. Palmer, P. Towers, N. Wedi, D. **Achuthavarier**, J. M. **Adams**, E. L. **Altshuler**, B. A. **Cash**, J. L. **Kinter** III, L. **Marx**, C. **Stan**, K. I. Hodges, 2011: High-Resolution Global Climate Simulations with the ECMWF Model in the Athena Project: Experimental Design, Model Climate and Seasonal Forecast Skill. *J. Climate*, doi:10.1175/JCLI-D-11-00265.1.
136. **Kirtman**, B. P., E. K. **Schneider**, D. M. **Straus**, D. Min, and R. Burgman, 2011b: How weather impacts the forced climate response. *Climate Dyn.* 37, 2389–2416, doi:10.1007/s00382-011-1083-3.
137. 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. Hydrometeor.*, **12**, 805–822.
138. **Krishnamurthy**, V., and S. Rai, 2011: Predictability of South Asian Monsoon circulation in the NCEP Climate Forecast System. *Adv. Geosci.*, **22**, 65-76.
139. Lee, S.-S., J.-Yi Li, B. Wang, K.-J. Ha, F.-F. Jin, D. M. **Straus**, and J. **Shukla**, 2011: Interdecadal changes in the storm track activity over the North Pacific and North Atlantic. *Climate Dyn.* DOI:10.1007/s00382-011-1188-9.
140. **Lu**, J., M. Zhang, B. **Cash**, and S. Li, 2011: Oceanic forcing for the East Asian rainfall in pace-making AGCM experiments. *Geophys. Res. Lett.* 38, L12702, doi:10.1029/2011GL047614

## COLA REFEREED PUBLICATIONS 1993-Present

---

141. Molteni, F., M. P. King, F. Kucharski, and D. M. **Straus**, 2011: Planetary-scale variability in the northern winter and the impact of land-sea thermal contrast. *Climate Dyn.*, 37, 151-170. doi: 10.1007/s00382-010-0906-z.
142. Mueller, B. and others, 2011: Evaluation of global observations-based evapotranspiration datasets and IPCC AR4 simulations, *Geophys. Res. Lett.* 38, L06402, doi: 10.1029/2010GL046230.
143. **Pan**, X., B. **Huang**, and J. **Shukla**, 2011: Sensitivity of the tropical Pacific seasonal cycle and ENSO to changes in mean state induced by a surface heat flux adjustment in CCSM3. *Climate Dyn.*, 37, 325-341, DOI 10.1007/s00382-010-0923-y.
144. Rai, S. and V. **Krishnamurthy**, 2011: Error Growth in CFS Daily Retrospective Forecasts of South Asian Monsoon. *J. Geophys. Res.*, 116, D03108, doi:10.1029/2010JD014840.
145. Satoh, M., K. Oouchi, T. Nasuno, H. Taniguchi, Y. Yamada, H. Tomita, C. Kodama, J. L. **Kinter III**, D. **Achuthavarier**, J. **Manganello**, B. **Cash**, T. Jung, T. Palmer, and N. Wedi, 2011: Intra-Seasonal Oscillation and its control of tropical cyclones simulated by high-resolution global atmospheric models. *Climate Dyn.*, doi10.1007/s00382-011-1235-6.
146. **Wu**, R., and J. L. **Kinter III**, 2011: Shortwave radiation-SST relationship over the mid-latitude North Pacific during boreal summer in climate models. *Clim. Dyn.*, 36, 2251-2264, doi: 10.1007/s00382-010-0775-5.
147. **Wu**, R., and B. P. Kirtman, 2011: Caribbean Sea rainfall variability during the rainy season and relationship to the equatorial Pacific and tropical Atlantic SST. *Clim. Dyn.*, in press, DOI: 10.1007/s00382-010-0927-7.
148. **Xu**, L., 2011: Snow cover as a source of climate predictability: Mechanisms of snow-atmosphere coupling. *Ph.D. Dissertation*, George Mason University.
149. **Xu**, L., and P. **Dirmeyer**, 2011a: Snow-atmosphere coupling strength in a global atmospheric model. *Geophys. Res. Lett.*, 38, L13401, doi:10.1029/2011GL048049.
150. **Yang**, X., and T. **DelSole**, 2011: Systematic Comparison of ENSO Teleconnection Patterns Between Models and Observations. *J. Climate*, 25, 425-446.
151. **Yilmaz**, M., T. **DelSole**, and P. R. Houser, 2011b: Improving Land Data Assimilation Performance with a Water Budget Constraint. *J. Hydrometeor.*, 12, 1040-1055.
152. **Zhang**, L. P. A. **Dirmeyer**, J. **Wei**, Z. **Guo** and C.-H. Lu, 2011a: Land-atmosphere Coupling Strength in the Global Forecast System, *J. Hydrometeor.*, 12, 147-156.
153. **Zhu**, J., B. **Huang** and M. Balmaseda, 2011a: An ensemble estimation of the variability of upper ocean heat content over the tropical Atlantic Ocean with multi-ocean reanalysis products. *Climate Dyn.* doi: 10.1007/s00382-011-1189-8 (published online).
154. **Zhu**, J., B. **Huang**, and Z. Wu, 2011c: The role of ocean dynamics in the interaction between the Atlantic meridional and equatorial modes. *J. Climate*, doi:10.1175/JCLI-D-11-00364.1.

**2010:**

155. **Achuthavarier**, D., and V. **Krishnamurthy**, 2010a: Relation between intraseasonal and interannual variability of the South Asian monsoon in the NCEP forecast systems, *J. Geophys. Res.*, **115**, D08104, doi:10.1029/2009JD012865.
156. **Achuthavarier**, D., and V. **Krishnamurthy**, 2010b: The leading mode of variability in the Indian monsoon region in the absence of ENSO variability in the NCEP CFS. *Adv. Geosciences*, **16**, 83–91.
157. **Bates**, S.C., 2010: Seasonal influences on coupled ocean-atmosphere variability in the tropical Atlantic Ocean. *J. Climate*, **23**, 582-603.
158. Brunet, G., M. Shapiro, B. Hoskins, M. Moncrieff, R. Dole, G. N. Kiladis, B. **Kirtman**, A. Lorenc, B. Mills, R. Morss, S. Polavarapu, D. Rogers, J. Schaake, and J. **Shukla**, 2010: Collaboration of the Weather and Climate Communities to Advance Sub-Seasonal to Seasonal Prediction. *Bull. Amer. Meteor. Soc.*, **91**, 1397-1406.
159. **Cash**, B. A., X. Rodó, J. L. **Kinter** III, and Md. Yunus, 2010: Non-ENSO variability and the regional climate of Bangladesh: Implications for cholera risk. *J. Climate* **23**, 2817–2831.
160. Chen, G., A. Plumb, J. **Lu**, 2010: Sensitivities of the zonal mean atmospheric response to SST forcing in an aquaplanet GCM. *Geophys. Res. Lett.*, **37**, , L12701, doi:10.1029/2010GL043473.
161. **Cruz**, C., 2010: Global Ocean Circulation Variability Induced by Southern Ocean Winds. *Ph.D. Dissertation*, George Mason University.
162. **DelSole**, T., 2010: Challenges in stochastic modeling of quasigeostrophic turbulence. In *Stochastic Physics and Climate Modeling*, T. N. Palmer and P. Williams, eds., Cambridge University Press, chap. 8, 207–230.
163. **DelSole**, T. and J. **Shukla**, 2010: Model fidelity versus skill in seasonal forecasting. *J. Climate*, **23**, 4794–4806.
164. **DelSole**, T. and X. **Yang**, 2010: State and parameter estimation in stochastic dynamical models. *Physica D*, **239**, 1781–1788.
165. **Dirmeyer**, P. A., and J. L. **Kinter** III, 2010: Floods over the US Midwest: A Regional Water Cycle Perspective. *J. Hydrometeor.*, **11**, 1172-1181.
166. **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.
167. **Drbohlav**, H.-K. and V. **Krishnamurthy**, 2010: Spatial structure, forecast errors and predictability of South Asian monsoon in CFS monthly retrospective forecasts. *J. Climate*, **23**, 4750–4769.
168. Feudale, L., and J. **Shukla**, 2010a: Influence of sea surface temperature on the European heat wave of 2003 summer. Part I: an observational study. *Climate Dyn.*, **36**, 1691-1703.
169. Feudale, L., and J. **Shukla**, 2010b: Influence of sea surface temperature on the European heat wave of 2003 summer. Part II: a modeling study. *Climate Dyn.*, **36**, 1705-1715.
170. Jin, D., and B. **Kirtman**, 2010a: The extratropical sensitivity to the meridional extent of tropical ENSO forcing. *Climate Dyn.*, **34**, doi: 10.1007/s00382-009-0600-1.
171. Jin, D., and B. **Kirtman**, 2010b: Impact of ENSO periodicity on North Pacific SST variability. *Climate Dyn.*, **34**, doi 10.1007/s00382-009-0619-3.

## COLA REFEREED PUBLICATIONS 1993-Present

---

172. 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.
173. **Krishnamurthy**, V., and R. S. Ajayamohan 2010: Composite structure of monsoon low pressure systems and its relation to Indian rainfall. *J. Climate*, **23**, 4285-4305.
174. **Krishnamurthy**, V., and V. Misra, 2010a: Daily atmospheric variability in the South American System. *Climate Dyn.*, doi:10.1007/s00382-010-0881-4.
175. **Krishnamurthy**, V., and V. Misra, 2010b: Observed ENSO teleconnections with the South American monsoon system. *Atmos. Sci. Lett.*, **11**, 7-12.
176. Kucharski, F., I.-S. Kang, D. M. **Straus** and M. P. King, 2010: Teleconnections in the Atmosphere and Oceans. *Bull. Amer. Met. Soc.*, **91**, 381-383, doi: 10.1175/2009BAMS2834.1
177. Lee, J., B. Wang, I.-S. Kang, J. **Shukla**, A. Kumar, J.-S. Kug, J.K.E. Schemm, J.-J. Luo, T. Yamagata, X. Fu, O. Alves, B. Stern, A. Rosati, and C.-K. Park, 2010: How are seasonal prediction skills related to models' performance on mean state and annual cycle? *Climate Dyn.*, **35**, 267-283.
178. **Lu**, J., G. Chen and D. Frierson, 2010: The position of the midlatitude storm track and eddy-driven westerlies in aquaplanet AGCMs. *J. Atmos. Sci.*, **17**, 3984-4000.
179. 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. Hydrometeor.*, **11**, 334-351.
180. **Narapusetty**, B., 2010: Impact Of Tropical Instability Waves In The Eastern Equatorial Pacific. *Ph.D. Dissertation*, George Mason University.
181. Navarra, A., J. L. **Kinter** III, and J. Tribbia, 2010: Crucial Experiments in Climate Science. *Bull. Amer. Meteor. Soc.*, **91**, 343-352.
182. Shapiro, M., J. **Shukla**, and co-authors, 2010: An Earth-System Prediction Initiative for the 21<sup>st</sup> Century, *Bull. Amer. Meteor. Soc.*, **91**, 1377-1388.
183. **Shukla**, J., T. N. Palmer, R. Hagedorn, B. Hoskins, J. L. **Kinter** III, J. Marotzke, M. Miller, and J. Slingo, 2010: Towards a New Generation of World Climate Research and Computing Facilities. *Bull. Amer. Meteor. Soc.*, **91**, 1407-1412.
184. **Stan**, C., M. Khairoutdinov, C. DeMott, D. M. Straus, V. **Krishnamurthy**, D. Randall, J. L. **Kinter**, and J. **Shukla**, 2010: An ocean-atmosphere climate simulation with an embedded cloud resolving model. *Geophys. Res. Lett.*, **37**, L01702, doi:10.1029/2009GL040822.
185. **Straus**, D. M., 2010: Synoptic-Eddy Feedbacks and Circulation Regime Analysis. *Mon. Wea. Rev.*, **138**, 4026-4034. doi: 10.1175/2010MWR3333.1.
186. Tippett, M. K., A. G. Barnston, and T. **DelSole**, 2010: Comments on "Finite samples and uncertainty estimates for skill measures for seasonal prediction". *Mon. Wea. Rev.*, **138**, 1487-149.
187. Tippett, M. K., T. **DelSole**, S. J. Mason, and A. G. Barnston, 2008: Regression-based methods for finding coupled patterns. *J. Climate*, **21**, 4384-4398.
188. Veljovic, K., B. Rajkovic, M. J. **Fennessy**, E. L. **Altshuler** and F. Mesinger, 2010: Regional climate modeling: Should one attempt improving on the large scales? Lateral boundary condition scheme: Any impact? *Meteor. Zeits.*, **19**, 237-246.

## COLA REFEREED PUBLICATIONS 1993-Present

---

189. **Wei, J.** and P. A. **Dirmeyer**, 2010: Toward understanding the large-scale land-atmosphere coupling in the models: Roles of different processes. *Geophys. Res. Lett.*, 37, L19707, doi:10.1029/2010GL044769.
190. **Wei, J.**, P. A. **Dirmeyer**, and Z. **Guo**, 2010a: How much do different land models matter for climate simulation? Part II: A decomposed view of the land-atmosphere coupling strength, *J. Climate*, 23, 3135-3145.
191. **Wei, J.**, P. A. **Dirmeyer**, Z. **Guo**, L. **Zhang**, and V. Misra, 2010b: How much do different land models matter for climate simulation? Part I: Climatology and variability. *J. Climate*, 23, 3120-3134.
192. **Wei, J.**, P. A. **Dirmeyer**, and J. Zhang, 2010c: Land caused uncertainties in climate change simulations. *Quart. J. Roy. Meteor. Soc.*, 136, 819-824.
193. **Wu, R.**, 2010: Subseasonal variability during the South China Sea summer monsoon onset. *Climate Dyn.*, 34, 629-642, doi: 10.1007/s00382-009-0679-4.
194. **Wu, R.** and J. L. **Kinter III**, 2010: The Atmosphere-Ocean Relationship in the Mid-Latitude North Pacific: Seasonal Dependence and East-West Contrast. *J. Geophys. Res.*, 115, D06101, doi:10.1029/2009JD012579.
195. **Wu, R.**, Z.-P. Wen, S. Yang, and Y.-Q. Li, 2010a: An interdecadal change in southern China summer rainfall around 1992-93. *J. Climate*, 23, 2389-2403.
196. **Wu, R.**, S. Yang, S. Liu, L. Sun, Y. Lian, and Z.-T. Gao, 2010b: Changes in the relationship between Northeast China summer temperature and ENSO. *J. Geophys. Res.*, 115, D21107, doi:10.1029/2010JD014422.
197. **Wu, R.**, and S.-W. Yeh, 2010: A further study of the tropical Indian Ocean asymmetric mode in boreal spring. *J. Geophys. Res.*, 115, D08101, doi:10.1029/2009JD012999.
198. **Wu, R.**, and L. Zhang, 2010: Biennial relationship of rainfall variability between Central America and equatorial South America. *Geophys. Res. Lett.*, 37, L08701, doi:10.1029/2010GL042732.
199. Wyant, M. C., Wood, R., Bretherton, C. S., Mechoso, C. R., Bacmeister, J., Balmaseda, M. A., Barrett, B., Codron, F., Earnshaw, P., Fast, J., Hannay, C., Kaiser, J. W., Kitagawa, H., Klein, S. A., Köhler, M., **Manganello, J.**, Pan, H.-L., Sun, F., Wang, S., and Wang, Y., 2010: The PreVOCA experiment: modeling the lower troposphere in the Southeast Pacific. *Atmos. Chem. Phys.*, 10, 4757-4774, 2010.
200. Xue, Y., F. De Sales, W. Lau, A Boone, J Feng, P. A. **Dirmeyer**, Z. **Guo**, K.-M. Kim, A. Kitoh, V. Kumar, I. Pocard-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.
201. **Yilmaz, T.** 2010: Improving Land Data Assimilation Performance With A Water Budget Constraint. *Ph.D. Dissertation*, George Mason University.
202. **Yilmaz, M.** and T. **DelSole**, 2010: Predictability of seasonal precipitation using joint probabilities. *J. Hydrometeor.*, 11, 533-541.
203. Zhou, L.-T., R. **Wu**, and R.-H. Huang, 2010: Variability of surface sensible heat flux over northwest China. *Atmos. Ocn. Sci. Lett.*, 3, 75-80.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2009:

204. **Achuthavarier**, D. 2009: Role of the Indian and Pacific Oceans in Indian Summer Monsoon Variability. *Ph.D. Dissertation*, George Mason University.
205. Bao, Z., Z. Wen, and R. **Wu**, 2009: Variability of aerosol optical depth over east Asia and its possible impacts. *J. Geophys. Res.*, 114, D05203, doi:10.1029/2008JD010603.
206. **Cash**, B. A., X. Rodó, and J. L. **Kinter** III, 2009a: Links between tropical Pacific SST and cholera incidence in Bangladesh: Role of the eastern and central tropical Pacific. *J. Climate*, **21**, 4647–4663.
207. **Cash**, B. A., X. Rodó, J. L. **Kinter** III, 2009b: Links between tropical Pacific SST and the regional climate of Bangladesh: Role of the western tropical and central extratropical Pacific. *J. Climate*, **22**, 1641-1660.
208. **DelSole**, T. and J. **Shukla**, 2009: Artificial skill due to predictor screening. *J. Climate*, **22**, 331–345.
209. **DelSole**, T. and M. K. Tippett, 2009a: Average predictability time: Part I. Theory. *J. Atmos. Sci.*, **66**, 1172–1187.
210. **DelSole**, T. and M. K. Tippett, 2009b: Average predictability time: Part II: Seamless diagnosis of predictability on multiple time scales. *J. Atmos. Sci.*, **66**, 1188–1204.
211. **DelSole**, T., M. **Zhao**, and P. A. **Dirmeyer**, 2009: A new method for exploring coupled land-atmosphere dynamics. *J. Hydrometeor.*, **10**, 1040–1050.
212. **Dirmeyer**, P. A., K. L. Brubaker, and T. **DelSole**, 2009a: Import and export of atmospheric water vapor between nations. *J. Hydrology*, **365**, 11–22.
213. **Dirmeyer**, P. A. and J. L. **Kinter** III, 2009: The “Maya Express”: Floods in the U.S. Midwest. *EOS, Trans. Amer. Geophys. Union*, **90**, 101-102.
214. **Dirmeyer**, P. A., C. A. Schlosser, and K. L. Brubaker, 2009b: Precipitation, recycling and land memory: An integrated analysis. *J. Hydrometeor.*, **10**, 278–288.
215. **Fan**, M. 2009: Low frequency North Atlantic SST variability: Weather noise forcing and coupled response. *Ph.D. Dissertation*, George Mason University, 205 pp.
216. Grainger, S., C. S. Frederiksen, X. Zheng, D. Fereday, C. K. Folland; E. K. **Jin**, J. L. **Kinter** III, J. R. Knight, S. Schubert, J. Syktus, 2009: Modes of Variability of Southern Hemisphere Atmospheric Circulation Estimated by AGCMs. *Clim. Dyn.*, **36**, 473, doi 10.1007/s00382-009-0720-7.
217. **Hu**, Z.-Z., and B. **Huang**, 2009: Interferential Impact of ENSO and PDO on Dry and Wet Conditions in the U. S. Great Plains. *J. Climate*, **22**. 6047-6065.
218. **Hu**, Z.-Z., B. **Huang**, and K. **Pegion**, 2009: Biases and the most predictable patterns in the NCEP CFS over the tropical Atlantic Ocean. In “The Atlantic and Indian Oceans: New Oceanographic Research”, edited by Edward S. Askew and James P. Bromley, Science Publishers, Inc., New York, USA (ISBN: 978-1-60692-475-4), pp.1-15.
219. **Jin**, D., and B. P. **Kirtman**, 2009: Why the Southern Hemisphere ENSO responses lead ENSO. *J. Geophys. Res.*, 114 doi:10.1029/2009JD012657.
220. **Jin**, E. K. and J. L. **Kinter** III, 2009: Characteristics of tropical Pacific SST predictability in coupled GCM forecasts using the NCEP CFS. *Climate Dyn.*, **32**, 675-691.
221. **Kirtman**, B. P., and D. Min, 2009: Multi-model ensemble ENSO prediction with CCSM and CFS. *Mon. Wea. Rev.*, **137**, 2908–2930, doi: 10.1175/2009MWR2672.1.



## COLA REFEREED PUBLICATIONS 1993-Present

---

222. **Kirtman**, B. P., D. M. **Straus**, D. Min, E. K. **Schneider**, and L. Siqueira, 2009: Toward linking weather and climate in the interactive ensemble NCAR climate model. *Geophys. Res. Lett.*, **36**, L13705, doi:10.1029/2009GL038389.
223. **Klinger**, B. A., and C. **Cruz**, 2009: Decadal response of global circulation to Southern Ocean zonal wind stress perturbation. *J. Phys. Oceanogr.*, **39**, 1888-1904.
224. 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.
225. **Krishnamurthy**, V., and B. P. **Kirtman**, 2009: Relation between Indian monsoon variability and SST. *J. Climate*, **22**, 4437-4458.
226. Kucharski, F., A. A. Scaife, J. H. Yoo, C. K. Folland, J. L. **Kinter** III, J. Knight, D. Fereday, A. M. Fischer, E. K. **Jin**, J. Kroger, N.-C. Lau, T. Nakaegawa, M. J. Nath, P. Pegion, E. Rozanov, S. Schubert, P. V. Sporyshev, J. Syktus, A. Voldoire, J. H. Yoon, N. Zeng, & T. Zhou, 2009b: The CLIVAR C20C Project. Skill of simulating Indian monsoon rainfall on interannual to decadal timescales. Does GHG forcing play a role? *Climate Dyn.*, doi:10.1007/s00382-008-0462-y.
227. Liang, J., S. Yang, Z.-Z. **Hu**, B. **Huang**, A. Kumar, and Z. Zhang, 2009: Predictable patterns of the Asian and Indo-Pacific summer precipitation in NCEP CFS. *Climate Dyn.*, **32**, 989-1001, DOI 10.1007/s00382-008-0420-8.
228. **Lu**, J., 2009: The dynamics of the Indian Ocean sea surface temperature forcing for the Sahel drought. *Climate Dyn.*, **33**, 445-460, doi: 10.1007/s00382-009-0596-6.
229. **Lu**, J., C. Deser, and T. Reichler, 2009: The cause for the widening of the tropical belt since 1958. *Geophys. Res. Lett.* **36**, L03803, doi: 10.1029/GL036076
230. **Manganello**, J. V., and B. **Huang**, 2009: The influence of systematic errors in the Southeast Pacific on ENSO variability and prediction in a coupled GCM. *Climate Dyn.*, **32**, 1015-1034, DOI 10.1007/s00382-008-0407-5.
231. Misra, V., S. Chan, R. **Wu**, and E. Chassignet, 2009: Air-sea interaction over the Atlantic warm pool in the NCEP CFS. *Geophys. Res. Lett.*, **36**, L15702, doi:10.1029/2009GL038737. "C"
232. Misra, V., and P. A. **Dirmeyer**, 2009: Air, sea and land interactions of the continental US hydroclimate. *J. Hydrometeor.*, **10**, 353-373.
233. Monahan, A. H. and T. **DelSole**, 2009: Information theoretic measures of dependence, compactness, and non-Gaussianity. *Nonlin. Processes Geophys.*, **16**, 57-64.
234. **Narapusetty**, B., T. **DelSole**, and M. K. Tippett, 2009: Optimal estimation of the climatological mean. *J. Climate*, **22**, 4845-4859.
235. **Pan**, X., 2009: Impact of Mean Climate on ENSO Simulation and Prediction. *Ph.D. Dissertation*, George Mason University.
236. Scaife, A., F. Kucharski, C. Folland, J. **Kinter** III, D. Fereday, A. Fischer, S. Grainger, E. **Jin**, I. Kang, J. Knight, S. Kusunoki, N. Lau, M. Nath, T. Nakaegawa, P. Pegion, S. Schubert, P. Sporyshev, J. Syktus, J. Yoon, N. Zeng, and T. Zhou, 2009: The CLIVAR C20C Project: Selected 20<sup>th</sup> century climate events. *Climate Dyn.*, **33**, 603-614, doi:10.1007/s00382-008-0451-1.
237. **Schneider**, E. K., M. J. **Fennessy**, and J. L. **Kinter** III, 2009: A Statistical-Dynamical Estimate of Winter ENSO Teleconnections in a Future Climate. *J. Climate*, **22**, 6624-6638.
238. **Shukla**, J., 2009: Seamless prediction of weather and climate: A new paradigm for modeling and prediction research. *MAUSAM*, **60**, 11-18.
239. **Shukla**, J., R. Hagedorn, B. Hoskins, J. **Kinter** III, J. Marotzke, M. Miller, T. N. Palmer, and J. Slingo, 2009: Revolution in Climate Prediction is Both Necessary and Possible: A Declaration at the World Modelling Summit for Climate Prediction. *Bull. Amer. Meteor. Soc.*, **90**, 175-178.

## COLA REFEREED PUBLICATIONS 1993-Present

---

240. **Stan**, C., and D. M. **Straus**, 2009: Stratospheric Predictability and Sudden Stratospheric Warming Events. *J. Geophys. Res.*, 114, D12103. DOI: 10.1029/2008JD011277
241. **Straus**, D. M. and D. **Paolino**, 2009: Intermediate time error growth and predictability: tropics versus mid-latitudes. *Tellus A*, 61, 579–586, doi:10.1111/j.1600-0870.2009.00411.x
242. Wang, B, Lee, J. Y., Kang, I. S., **Shukla**, J., Park, C.K., Kumar, A., Schemm, J., Cocke, S., Kug, J.S., Luo, J. J., Zhou, T., Wang, B., Fu, X., Yun, W. T., Alves, O., **Jin**, E.K., **Kinter**, J., **Kirtman**, B., Krishnamurti, T., Lau, N. C., Lau, W., Liu, P., Pegion, P., Rosati, T., Schubert, S., Stern, W., Suarez, M., Yamagata, T., 2009: Advance and Prospectus of Seasonal Prediction: Assessment of the APCC/CLIPAS 14-Model Ensemble Retrospective Seasonal Prediction (1980-2004). *Climate Dyn.*, 33, 93-117.
243. **Wu**, R., 2009: Possible role of the Indian Ocean in the out-of-phase transition of the Australian to Indian summer monsoon. *J. Climate*, 22, 1834-1849.
244. **Wu**, R. and J. L. **Kinter** III, 2009 : Analysis of the Relationship of U.S. Droughts with SST and Soil Moisture : Distinguishing the Time Scale of Droughts. *J. Climate*, 22, 4520-4538.
245. **Wu**, R., and B. P. **Kirtman**, 2009: Variability of El Niño-Southern Oscillation-related noise in the equatorial Pacific Ocean. *J. Geophys. Res.*, 114, D23106, doi:10.1029/2009JD012456.
246. **Wu**, R., B. P. **Kirtman**, and H. van den Dool, 2009: An analysis of ENSO prediction skill in the CFS retrospective forecast. *J. Climate*, 22, 1801-1818.
247. **Wu**, Z. and N. Huang, 2009: Ensemble Empirical Model Decomposition: A Noise-Assisted Data Analysis Method. *Adv. Adaptive Data Analysis*, 1, 1-41.
248. **Yang**, X. and T. **DelSole**, 2009a: A diffuse ensemble square root filter. *Nonlin. Processes Geophys.*, 16, 475–486.
249. **Yang**, X. and T. **DelSole**, 2009b: Using the ensemble Kalman Filter to estimate multiplicative model parameters. *Tellus*, 61, 601–609.
250. **Yeh**, S.-W., and B. P. **Kirtman**, 2009: Interannual atmospheric variability and interannual-to-decadal ENSO variability in a CGCM. *J. Climate*, 22, 2335-2355.
251. Zheng, X., D. M. **Straus**, C. S. Frederiksen, and S. Grainger, 2009: Potentially predictable patterns of seasonal mean geopotential heights in an ensemble of climate simulations with the COLA AGCM *Quart. J. Royal. Meteor. Soc.*, 135, 1816 - 1829. DOI: 10.1002/qj.492
252. Zhou, L., R. E. Dickinson, A. Dai, and P. A. **Dirmeyer**, 2009a: Spatiotemporal patterns of changes in maximum and minimum temperatures in multi-model simulations. *Geophys. Res. Lett.*, 36, L02702, doi:10.1029/2008GL036141.
253. Zhou, L., R. E. Dickinson, P. **Dirmeyer**, A. Dai, and S.-K. Min, 2009b: Detection and attribution of anthropogenic forcing to diurnal temperature range changes from 1950 to 1999: comparing multi-model simulations with observations. *Climate Dyn.*, 10.1007/s00382-009-0644-2.
254. Zhou, L.-T., and R. **Wu**, 2009: Respective impacts of the East Asian winter monsoon and ENSO on winter rainfall in China. *J. Geophys. Res.*, 115, D02107, doi:10.1029/2009JD012502.
255. Zhou, T., B. Wu, A. A. Scaife, S. Bronnimann, A. Cherchi, C. Deser, A. M. Fischer, C. K. Folland, E. K. **Jin**, J. **Kinter** III, F. Kucharski, S. Kusunoki, N.-C. Lau, L. Li, M. J. Nath, T. Nakaegawa, P. Pegion, E. Rozanov, S. Schubert, P. Sporyshev, A. Voltaire, and J. H. Yoon, 2009c: The CLIVAR C20C Project: Which components of the Asian-Australian Monsoon variability are forced and reproducible? *Climate Dyn.*, 33, 1051-1068.

---

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2008:

256. Bates, S.C., 2008: Coupled ocean-atmosphere interaction and variability in the tropical Atlantic Ocean with and without an annual cycle. *J. Climate*, **21**, 5501-5523.
257. **Burgman**, R. J., P. S. **Schopf** and B. P. **Kirtman**, 2008: ENSO decadal variability. *J. Climate*, **21**, 5482-550.
258. **Cash**, B. A., X. Rodó, J. L. **Kinter** III, M. J. **Fennesy**, and B. **Doty**, 2008: Differing Estimates of Observed Bangladesh Summer Rainfall. *J. Hydrometeor.*, **9**, 1106-1114
259. **DelSole**, T. and M. K. Tippett, 2008: Predictable components and singular vectors. *J. Atmos. Sci.*, **65**, 1666-1678.
260. **DelSole**, T., M. **Zhao**, P. **Dirmeyer**, and B. **Kirtman**, 2008: Empirical correction of a coupled land-atmosphere model. *Mon. Wea. Rev.*, **136**, 4063-407
261. **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.
262. **Hu**, Z.-Z., B. **Huang**, and K. **Pegion**, 2008a: Leading patterns of the tropical Atlantic variability in a coupled general circulation model. *Climate Dynamics*, **30**: 703-726; DOI 10.1007/s00382.007.0318x.
263. **Hu**, Z.-Z., B. **Huang**, and K. **Pegion**, 2008b: Low cloud error over the southeastern Atlantic in the NCEP CFS and their association with lower-tropospheric stability and air-sea interaction. *J. Geophys. Res.*, **113**, D12114, DOI 10.1029/2007JD009514.
264. **Huang**, B., and J. **Shukla**, 2008: Interannual variability of the South Indian Ocean in observations and a coupled model. *Indian J, Marine Sci.*, **38**, 13-34.
265. **Jin**, D., 2008: The Impact of ENSO on the Extratropics. *Ph.D. Dissertation*, George Mason University
266. **Jin**, E. K., J. L. **Kinter** III, B. Wang, C.-K. Park, I.-S. Kang, B. P. **Kirtman**, J.-S. Kug, A. Kumar, J.-J. Luo, J. Schemm, J. **Shukla**, & T. Yamagata, 2008: Current status of ENSO prediction skill in coupled O-A models. *Climate Dyn.*, **31**, 647-664, doi:10.1007/s00382-008-0397-3.
267. **Krishnamurthy**, V., and J. **Shukla**, 2008: Seasonal persistence and propagation of intraseasonal patterns over the Indian monsoon region. *Climate Dyn.*, **30**, 353-369.
268. **Manganello**, J. V., 2008: The Influence of Sea Surface Temperature Anomalies on Low-Frequency Variability of the North Atlantic Oscillation. *Clim. Dyn.*, **30**, 621-641, 2008.
269. **Misra**, V., L. **Marx**, M. **Fennesy**, B. **Kirtman**, and J. L. **Kinter** III, 2008: A comparison of climate prediction and simulation over the tropical Pacific. *J. Climate*, **21**, 3601-3611.
270. Pascual, M., L. F. Chaves, X. Rodo, B. A. **Cash** and Md. Yunus, 2008: Predictability of endemic cholera: the role of climate variability and disease dynamics. *Climate Research*, **36**, 131-140.
271. 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
272. Sahoo, A. K., P. R. Houser, C. Ferguson, E. F. Wood, P. A. **Dirmeyer**, and M. Kafatos, 2008: Evaluation of AMSR-E soil moisture results using the in-situ data over the Little River Experimental Watershed, Georgia. *Remote Sens. Env.*, **112**, 3142-3152.

## COLA REFEREED PUBLICATIONS 1993-Present

---

273. **Stan, C.** and B. P. **Kirtman**, 2008: The influence of atmospheric noise and uncertainty in ocean initial conditions on the limit of predictability in a coupled GCM. *J. Climate*, 21, 3487-3503, doi:10.1175/2007JCLI2071.1
274. Tippet, M. K., T. **DelSole**, S. J. Mason, and A. G. Barnston, 2008: Regression-based methods for finding coupled patterns. *J. Climate*, 21, 4384-4398.
275. **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.
276. **Yang, X.**, T. **DelSole**, and H.-L. Pan, 2008: Empirical correction of the NCEP Global Forecast System. *Mon. Wea. Rev.*, 136, 5224-5233.
277. **Yeh, S.-W.**, and B. P. **Kirtman**, 2008: The low-frequency relationship of the tropical-North Pacific sea surface temperature teleconnections. *J. Climate*, 21, 3416-3432.
278. Zheng, X., D. M. **Straus**, and C. S. Frederiksen, 2008: A Variance Decomposition Approach to the Prediction of the Seasonal Mean Circulation: Comparison with Dynamical Ensemble Prediction using NCEP's CFS. *Quart. J. Royal. Meteor. Soc.*, **134**, 1997-2009. DOI: 10.1002/qj.330
279. Zhou, L., R. Dickinson, P. A. **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.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2007:

280. **Cash**, B. A., **Schneider**, E. K. and Bengtsson, L., 2007: Origin of climate sensitivity differences: role of selected radiative processes in two GCMs. *Tellus A*, 59: 155–169. doi: 10.1111/j.1600-0870.2006.00224.x
281. **DelSole**, T., 2007: A Bayesian framework for multimodel regression. *J. Climate*, **20**, 2810–2826.
282. **DelSole**, T., 2007: Optimal perturbations in quasigeostrophic turbulence. *J. Atmos. Sci.*, 64, 1350–1364
283. **DelSole**, T. and M. K. Tippett, 2007: Predictability: Recent insights from information theory. *Rev. Geophys.* doi:10.1029/2006RG000202.
284. **Dirmeyer**, P. A., K. L. Brubaker, 2007: Characterization of the global hydrologic cycle from a back-trajectory analysis of atmospheric water vapor. *J. Hydrometeor*, **8**, 20–37.
285. **Drbohlav**, H.-K. L., S. Gualdi, A. Navarra, 2007: A diagnostic study of the Indian Ocean dipole mode in El Niño and Non-El Niño years. *J. Climate*, **20**, 2961–2977.
286. **Feudale**, L. and J. **Shukla**, 2007: Role of Mediterranean SST in enhancing the European heat wave of summer 2003. *Geophys. Res. Lett.*, 34, doi:10.1029/2006GL027991.
287. **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.
288. **Hu**, Z.-Z., and B. **Huang**, 2007a: The predictive skill and the most predictable pattern in the tropical Atlantic: The effect of ENSO. *Mon. Wea. Rev.*, 135, 1786-1806.
289. **Hu**, Z.-Z., and B. **Huang**, 2007b: Physical processes associated with tropical Atlantic SST gradient: The anomalous evolution in the southeastern ocean. *J. Climate*, 20, 3366-3378.
290. **Huang**, B., and Z.-Z. **Hu**, 2007: Cloud-SST feedback in southeastern tropical Atlantic anomalous events. *J. Geophys. Res.*, 112, C03015, doi:10.1029/2006JC003626.
291. **Huang**, B., Z.-Z. **Hu**, and B. Jha, 2007: Evolution of model systematic errors in the tropical Atlantic basin from the NCEP coupled hindcasts. *Climate Dyn.*, 28, 661-682.
292. **Huang**, B., and J. **Shukla**, 2007a: On the mechanisms of the interannual variability in the tropical Indian Ocean, Part I: The role of remote forcing from tropical Pacific. *J. Climate*, 20, 2917-2936.
293. **Huang**, B., and J. **Shukla**, 2007b: On the mechanisms of the interannual variability in the tropical Indian Ocean, Part II: Regional processes. *J. Climate*, 20, 2937–2960.
294. **Krishnamurthy**, V., and J. **Shukla**, 2007: Intraseasonal and seasonally persisting patterns of Indian monsoon rainfall. *J. Climate*, **20**, 3–20.
295. **Misra**, V., 2007: Addressing the issue of systematic errors in a regional climate model. *J. Climate*, **20**, 801–818.
296. **Misra**, V., L. **Marx**, J. L. **Kinter** III, B. P. **Kirtman**, Z. **Guo**, D. **Min**, M. J. **Fennessy**, P. A. **Dirmeyer**, R. A. **Kallummal**, and D. M. **Straus**, 2007: Validating and understanding the ENSO simulation in two coupled climate models. *Tellus*, **59A**, 292-308.
297. **Misra**, V. and Y. **Zhang**, 2007: The fidelity of NCEP-CFS seasonal hindcasts over Nordeste. *Mon. Wea. Rev.*, **135**, 618–627.
298. **Pegion**, K., 2007: Potential Predictability of Tropical Intraseasonal Variability in the NCEP CFS. *Ph.D. Dissertation*, George Mason University.
299. 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

## COLA REFEREED PUBLICATIONS 1993-Present

---

- modeling with NASA/GSFC's Land Information System. *Innovations in Systems and Software Engineering*, **3**, doi:10.1007/s11334-007-0028-x.
300. Randall, D., R. Wood, S. Bony, R. Coleman, T. Fichefet, J. Fyfe, V. Kattsov, A. Pitman, J. **Shukla**, J. Srinivasan, R. Stouffer, A. Sumi, and K. Taylor, 2007: Chap. 8 - Climate Models and Their Evaluation, in *Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007*, S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. Avery, M. Tignor and H. Miller (eds.), Cambridge Univ. Press, New York, NY, 589-662.
301. **Schneider**, E. K. and M. **Fan**, 2007: Weather noise forcing of surface climate variability. *J. Atmos. Sci.*, **64**, 3265-3280.
302. **Shukla**, J., **2007**: Monsoon Mysteries. *Science*, **318**, 204-205.
303. **Stan**, C., and D. M. **Straus**, 2007: Is blocking a circulation regime? *Mon. Wea. Rev.*, **135**, 2406-2413. doi: 10.1175/MWR3410.1
304. **Straus**, D. M., S. Corti, F. Molteni, 2007: Circulation regimes: chaotic variability versus SST-forced predictability. *J. Climate*, **20**, 2251-2272, doi: 10.1175/JCLI4070.1
305. **Straus**, D. M. and V. **Krishnamurthy**, 2007: The preferred structure of the interannual Indian monsoon circulation variability. *Pure Appl. Geophys.*, **164**, 1717-1732, DOI 10.1007/s00024-007-0248-x.
306. **Vikhliav**, Y., P. **Schopf**, T. **DelSole**, and B. **Kirtman**, 2007: Finding multiple basin modes in a linear ocean model. *J. Atmos. Ocean Tech.*, **24**, 1033-1049.
307. **Wu**, R., B. P. **Kirtman**, and V. **Krishnamurthy**, 2007: An asymmetric mode of the tropical Indian Ocean rainfall variability in boreal spring. *J. Geophys. Res.*, **113**, D05104, doi:10.1029/2007JD009316.
308. **Wu**, Z., E. K. **Schneider**, B. P. **Kirtman**, E. S. Sarachik, N. E. Huang, and C. J. Tucker, 2007: The modulated annual cycle - an alternative reference frame for climate anomalies. *Climate Dyn.*, **31**, 823-841, DOI: 10.1007/s00382-008-0437-z.
309. Yan, B., and R. **Wu**, 2007: Relative roles of different components of the basic state in the phase locking of El Niño mature phases. *J. Climate*, **20**, 4267-4277.
310. **Yeh**, S.-W., B. P. **Kirtman**, 2007: ENSO Amplitude Changes due to Climate Change Projections in Different Coupled Models. *J. Climate*, **20**, 203-217.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2006:

311. **Bates, S.**, 2006: The Role of the Annual Cycle in the Coupled Ocean-Atmosphere Variability in the Tropical Atlantic Ocean. *Ph.D. Diss.*, George Mason University.
312. **Betts, A., M. Zhao, P. A. Dirmeyer,** and A. C. M. Beljaars, 2006: Comparison of ERA-40 and NCEP/DOE near-surface data sets with ISLSCP-II data sets. *J. Geophys. Res.*, 111, doi:10.1029/2006JD007174
313. **Burgman, R.**, 2006: ENSO Decadal Variability in a Tropically-Forced Hybrid Coupled Model. *Ph.D. Dissertation*, George Mason University.
314. **Cash, B. A., P. J. Kushner,** and G. K. Vallis, 2006: Comment on "On the presence of annular variability in an aquaplanet model." *Geophys. Res. Lett.*, 34, doi:10.1029/2006GL027274.
315. **Chang, P., T. Yamagata, P. S. Schopf,** and coauthors, 2006: Climate fluctuations of tropical coupled system - the role of ocean dynamics. *J. Climate*, 19, 5122-5174.
316. **DelSole, T.**, 2006: Low-frequency variations of surface temperature in observations and simulations. *J. Climate*, 19, 4487-4507.
317. **DelSole, T.** and **J. Shukla**, 2006: Correction note on "Linear prediction of Indian monsoon rainfall". *J. Climate*, 19, 3029-3030
318. **DelSole, T.**, and **J. Shukla**, 2006: Specification of wintertime North American surface temperature. *J. Climate*, 19, 2691-2716.
319. **DeWitt, D. G.** and **E. K. Schneider**, 2006: Diagnosing the annual cycle modes in the tropical Atlantic Ocean using a directly coupled atmosphere-ocean GCM. *J. Climate*, 19, 5319-5342.
320. **Dirmeyer, P. A.**, 2006: The hydrologic feedback pathway for land-climate coupling. *J. Hydrometeor.*, 7, 857-867.
321. **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
322. **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.
323. **Dirmeyer, P. A., R. D. Koster,** and **Z. Guo**, 2006: Do global models properly represent the feedback between land and atmosphere? *J. Hydrometeor.*, 7, 1177-1198.
324. **Feudale, L.**, 2006: Extreme Events in Europe and North America During 1950-2003: An Observational and Modeling Study. *Ph.D. Diss.*, George Mason University.
325. **Gao, X.**, and **P. A. Dirmeyer**, 2006: Multi-model analysis, validation, and transferability study for global soil wetness products. *J. Hydrometeor.*, 7, 1218-1236.
326. **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.
327. **Guo, Z., P. A. Dirmeyer, Z.-Z. Hu, X. Gao,** and **M. Zhao**, 2006: Evaluation of GSWP-2 soil moisture simulations, part 2: Sensitivity to external meteorological forcing. *J. Geophys. Res.* 111, D22S03, doi:10.1029/2006JD007845.
328. **Guo, Z.-C., 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. Hydrometeor.* 7, 611-625.

## COLA REFEREED PUBLICATIONS 1993-Present

---

329. 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.
330. **Hu**, Z.-Z., and B. **Huang**, 2006: Air-sea coupling in the North Atlantic during summer. *Climate Dyn.*, 26(2), DOI: 10.1007/s00382-005-0094-4, 441-457.
331. **Hu**, Z.-Z. and B. **Huang**, 2006: Physical processes associated with tropical Atlantic SST meridional gradient. *J. Climate*, 19, 5500-5518.
332. **Hu**, Z.-Z., and B. **Huang**, 2006: On the significance of the relationship between the North Atlantic Oscillation in winter and SST anomalies. *J. Geophys. Res.*, 26, D12103, doi:10.1029/2005JD006339.
333. **Hu**, Z.-Z. and B. **Huang**, 2006: The predictive skill and the most predictable pattern in the tropical Atlantic: The effect of ENSO. *Mon. Wea. Rev.*, 135, 1786–1806.
334. **Huang**, B. and Z.-Z. **Hu**, 2006: Cloud-SST feedback in southeastern tropical Atlantic anomalous events. *J. Geophys. Res.*, 112, C03015.1-C03015.19.
335. **Klinger**, B. A., C. **Cruz**, and P. **Schopf**, 2006: Targeted Shapiro filter for ocean models. *Ocean Modeling*, 13, 148-155
336. Koster, R. D., Z.-C. **Guo**, 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. Hydrometeor.* 7, 590-610.
337. Krishnan, R., K. V.Ramesh, B. K. Samala, G. Meyers, J. M. Slingo, and M. J. **Fennessy**, 2006: Indian Ocean-monsoon coupled interactions and impending monsoon droughts. *Geophys. Res. Lett.*, 33, L08711, doi:10.1029/2006GL025811.
338. Kug, J.-S., B. P. **Kirtman**, I.-S. Kang, 2006: Interactive feedback between ENSO and the Indian Ocean in an interactive coupled model. *J. Climate*, 19, 6371–6381.
339. 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. *Environ. Modelling Software*, 21, 1402-1415.
340. Meehl, G. A., J. M. Arblaster, D. M. Lawrence, A. Seth, E. K. **Schneider**, B. P. **Kirtman**, and D. **Min**, 2006: Monsoon regimes in the CCSM3. *J. Climate*, 19, 2482-2495.
341. Mehta, V., Y. Kushnir, J. Lean, D. Legler, R. Lukas, A. Proshutinsky, N. Rosenberg, H. von Storch, P. S. **Schopf**, and W. White, 2006: The CRCES Workshop on Decadal Climate Variability. *Bull. Amer. Meteor. Soc.*, 87, 1223-1225.
342. **Misra**, V., 2006: A sensitivity study of the coupled simulation of the Northeast Brazil rainfall variability. *J. Geophys. Res.*, 112, doi: 10.1029/2006JD008093.
343. **Misra**, V., 2006: Understanding the predictability of seasonal precipitation over Northeast Brazil. *Tellus*, 58A, 307-319.
344. Ruiz-Moreno, D., M. Pascual, M. J. Bouma, A. Dobson, and B. A. **Cash**, 2006: Cholera Seasonality in Madras (1901-1940): Dual Role for Rainfall in Endemic and Epidemic Regions. *Eco. Health*, 4, 52-62.
345. **Schopf**, P. S., and R. J. **Burgman**, 2006: A simple mechanism for ENSO residuals and asymmetry. *J. Climate*, 19, 3167-3179.



## COLA REFEREED PUBLICATIONS 1993-Present

---

346. Seneviratne, S. I., R. D. Koster, Z. **Guo** and P. A. **Dirmeyer**, 2006: Soil moisture memory in AGCM simulations: Analysis of Global Land-Atmosphere Coupling Experiment (GLACE) data. *J. Hydrometeor.*, 7, 1090-1112.
347. **Shukla**, J., T. **DelSole**, M. **Fennessy**, J. L. **Kinter** III, and D. **Paolino**, 2006: Climate model fidelity and projections of climate change. *Geophys. Res. Lett.*, 33, doi:10.1029/2005GL025579.
348. **Shukla**, J. and J. L. **Kinter** III, 2006: Predictability of seasonal climate variations: A pedagogical review. In *Predictability of Weather and Climate*, T. Palmer and R. Hagedorn, eds. (Cambridge University Press, Cambridge, UK, 702 pp.), 306-341.
349. **Wu**, R., and B. P. **Kirtman**, 2006a: Changes in spread and predictability associated with ENSO in an ensemble coupled GCM. *J. Climate*, 19, 4378-4396.
350. **Wu**, R., and B. P. **Kirtman**, 2006: Observed relationship of spring and summer East Asian rainfall with winter and spring Eurasian snow. *J. Climate*, 20, 1285-1304.
351. **Wu**, R., and B. P. **Kirtman**, 2006: Role of the Indian Ocean in the biennial transition of the Indian summer monsoon. *J. Climate*, 20, 2147-2164.
352. **Wu**, R., B. P. **Kirtman**, and K. **Pegion**, 2006: Local air-sea relationship in observations and model simulations. *J. Climate*, 19, 4914-4932.
353. **Yeh**, S.-W., and B. P. **Kirtman** (2006), Origin of decadal El Niño–Southern Oscillation–like variability in a coupled general circulation model, *J. Geophys. Res.*, 111, C01009, doi:10.1029/2005JC002985.
354. **Yeh**, S.-W., R. **Wu**, and B. P. **Kirtman**, 2006: Impact of Indian Ocean on ENSO variability in a hybrid coupled model. *Quart. J. Roy. Meteor. Soc.*, 133, 445-457.

---

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2005:

355. **Bailey**, D. A., P. B. Rhines, and S. Häkkinen, 2005: Formation and pathways of North Atlantic Deep Water in a coupled ice-ocean model of the Arctic-North Atlantic Oceans. *Climate Dyn.*, 25, doi:10.1007/s00382-005-0050-3.
356. **Cash**, B. A., P. J. Kushner, and G. K. Vallis, 2005: Zonal asymmetries, teleconnections, and annular modes in a GCM. *J. Atmos. Sci.*, 62, 207-219.
357. **Cash**, B. A., E. K. **Schneider**, and L. Bengtsson, 2005: Origin of regional climate differences: Role of boundary conditions and model formulation in two GCMs. *Climate Dyn.*, 25, 709-723.
358. **DelSole**, T., 2005: Predictability and information theory. Part II: Imperfect forecasts. *J. Atmos. Sci.*, 62, 3368-3381.
359. **Dirmeyer**, P. A., 2005: The land surface contribution to boreal summer season predictability. *J. Hydrometeor.*, 6, 618-632.
360. GSWP-2 Project, 2005: Global Soil Wetness Project – Multi-Model Analysis Version 1.0. DVD (available from Center for Ocean-Land-Atmosphere Studies, 4041 Powder Mill Road, Suite 302, Calverton, MD 20705).
361. **Hu**, Z.-Z., **R. Wu**, J. L. **Kinter** III, and S. Yang, 2005: Connection of summer rainfall variations in south and east Asia: role of El Nino Southern Oscillation. *Int. J. Climatology*, 25, 1279-1289.
362. **Huang**, B., and J. **Shukla**, 2005: The ocean-atmospheric interactions in the tropical and subtropical Atlantic Ocean. *J. Climate*, 18, 1652-1672.
363. Kang, I.-S. and J. **Shukla**, 2005: Dynamical seasonal prediction and predictability of monsoon. In *The Asian Monsoon* (B. Wang, ed.), Praxis Pub. Ltd., Chichester, UK, 585-612.
364. **Kirtman**, B. P., K. **Pegion**, and S. **Kinter**, 2005: Internal atmospheric dynamics and climate variability. *J. Atmos. Sci.*, 62, 2220-2233.
365. **Misra**, V., 2005: On the simulation of the intraseasonal variance of the South American summer Monsoon. *Mon. Wea. Rev.*, 133, 663-676.
366. Schlosser, C. A., and B. P. **Kirtman**, 2005: Predictable skill and its association to sea surface temperatures in an ensemble climate simulation. *J. Geophys. Res.*, 110, doi:10.1029/2005JD005835.
367. Shen, S. P., T. Shu, N. E. Huang, Z. **Wu**, G. R. North, T. R. Carl, and D. R. Easterling, 2005: HHT analysis of the nonlinear and non-stationary annual cycle of daily surface air temperature data. In *Hilbert-Huang Transform: Introduction and Applications*, pp 187-210, Ed. N. E. Huang and S. S. P. Shen, World Scientific, Singapore, 311pp.
368. **Vikhliayev**, Y., 2005: The Role of Ocean Basin Modes in Excitation of North Pacific Decadal Variability. *Ph.D. Dissertation*, George Mason University.
369. Wang, B., Q. Ding, I.-S. Kang, J. **Shukla**, E. **Jin**, X. Fu and F. Doblas-Reyes, 2005: Fundamental challenge in simulation and prediction of summer monsoon rainfall. *Geophys. Res. Lett.*, 32, L15711, doi:10.1029/2005GL022734.
370. **Wu**, R., J. L. **Kinter** III and B. P. **Kirtman**, 2005: Discrepancy of interdecadal changes in the Asian region between the NCEP-NCAR reanalysis and observations. *J. Climate*, 18, 3048-3067.
371. **Wu**, R., and B. P. **Kirtman**, 2005: Near-annual SST variability in the equatorial Pacific in a coupled general circulation model. *J. Climate* 18, 4454-4473.
372. **Wu**, R., and B. P. **Kirtman**, 2005: Role of Indian and Pacific Ocean air-sea coupling in tropical atmospheric variability. *Climate Dyn.* 25, 155-170.

## COLA REFEREED PUBLICATIONS 1993-Present

---

373. **Wu, Z.**, and N. E. Huang, 2005: Statistical significant test of intrinsic mode functions. In *Hilbert-Huang Transform: Introduction and Applications*, pp 125-148, Ed. N. E. Huang and S. S. P. Shen, World Scientific, Singapore, 360pp
374. **Yeh, S.- W.**, and B. P. **Kirtman**, 2005: Pacific decadal variability and ENSO amplitude modulation. *Geophys. Res. Lett.*, 32, doi:10.1029/2004GL02173.
375. **Zhao, M.** and A. J. Pitman, 2005: The relative impact of regional scale land cover change and increasing CO<sub>2</sub> over China. *Adv. Atmos. Sci.*, 22, 58-68.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2004:

376. **Anderson**, W., 2004: Oceanic Sill-Overflow Systems: Investigation and Simulation with the Poseidon Ocean General Circulation Model. *Ph.D. Dissertation*, George Mason University.
377. 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. Verant, D. Versegny, and P. Viterbo, 2004: The Rhône-aggregation land surface scheme intercomparison project. *J. Climate*, 17, 187-208.
378. Bromwich, D. H., Z.-C. **Guo**, L. Bai, and Q.-S. Chen, 2004a: Modeled Antarctic precipitation. Part I: Spatial distribution and temporal variability. *Journal of Climate*, 17, 427-447.
379. Bromwich, D. H., A. J. Monaghan, and Z.-C. **Guo**, 2004b: Modeling the ENSO modulation of Antarctic climate in the late 1990s with Polar MM5. *Journal of Climate*, 17, 109-132.
380. Chang, P., R. Saravanan, T. **DelSole**, F. Wang, 2004: Predictability of linear coupled systems. Part I: Theoretical analyses. *J. Climate*, 17, 1474-1486.
381. **DelSole**, T., 2004: Predictability and information theory. Part I: measures of predictability. *J. Atmos Sci.* 61, 2425-2440.
382. **DelSole**, T., 2004: Stochastic models of quasigeostrophic turbulence. *Surveys in Geophys.*, 24, 107-149.
383. **DelSole**, T., 2004: The necessity of instantaneous optimals in stationary turbulence. *J. Atmos Sci.*, 61, 1086-1091.
384. **Dirmeyer**, P. A. (ed.), 2004: Part C: The value of land surface data consolidation. *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Springer Verlag, 245-296
385. **Dirmeyer**, P. A., Z. **Guo**, and X. **Gao**, 2004: Validation and forecast applicability of multi-year global soil wetness products. *J. Hydrometeor.*, 5, 1011-1033
386. **Dirmeyer**, P. A., and M. **Zhao**, 2004: Flux replacement as a method to diagnose coupled land-atmosphere model feedback. *J. Hydrometeor.* 5, 1034-1048.
387. **Guo**, Z.-C., D. H. Bromwich, and K. M. Hines, 2004: Modeled Antarctic precipitation. Part II: ENSO modulation over West Antarctica. *J. Climate*, 17, 448-465.
388. **Hu**, Z.-Z., S. I. Kuzmina, L. Bengtsson, and D. M. Holland, 2004: Arctic sea-ice change and its connection with Arctic climate change in CMIP2 simulations. *J. Geophys. Res.*, 109 (D10), D10106 10.1029/2003JD004454.
389. **Hu**, Z.-Z., E. K. Schneider, U. Bhatt and B. P. **Kirtman**, 2004: Potential for influence of land surface processes on ENSO. *J. Geophys. Res.*, 109, doi:10.1029/2004JD004771.
390. **Hu**, Z.-Z. and Z. **Wu**, 2004: The intensification and shift of the annual North Atlantic Oscillation in a global warming scenario simulation. *Tellus*, 56A (2), 112-124.
391. **Huang**, B., 2004: Remotely forced variability in the tropical Atlantic Ocean. *Climate Dynamics*, 23, 133-152, DOI: 10.1007/s00382-004-0443-8.
392. **Huang**, B., P. S. **Schopf**, and J. **Shukla**, 2004: Intrinsic ocean-atmosphere variability in the tropical Atlantic Ocean. *J. Climate*, 17, 2058-2077.
393. Jacka, T.H., Abdalati, W. Allison, I., Carsey, F., Casassa, G., Fily, M., Frezzotti, M., Fricker, H.A., Genthon, C., Goodwin, I., **Guo**, Z., Hamilton, G.S., Hindmarsh, R.C.A., Hulbe, C. L., Jezek, K.C., Scambos, T.A., Shuman, C., Skvarca, P., Takahashi, S., van de Wal, R.S.W., Vaughan, D.G., Wang, W.L., Warner, R.C., Wingham, D.J., Young, N.W., Zwally, H.J., ISMASS Comm., 2004:

## COLA REFEREED PUBLICATIONS 1993-Present

---

- Recommendations for the collection and synthesis of Antarctic Ice Sheet mass balance data. *Global Planet Change*, 42, 1 - 15.
394. Jury, M. R., and B. **Huang**, 2004: The Rossby wave as a key mechanism of Indian Ocean climate variability. *Deep Sea Res*, 51, 2123-2136.
395. 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, 545 pp.
396. **Kinter** III, J. L., M. J. **Fennessy**, V. **Krishnamurthy** and L. **Marx**, 2004: An evaluation of the apparent interdecadal shift in the tropical divergent circulation in the NCEP-NCAR reanalysis. *J. Climate*, 17, 349-361.
397. **Klinger**, B. A., S. Drijfhout, J. Marotzke, and J. Scott, 2004: Remote wind-driven overturning in the absence of the Drake Passage Effect. *J. Phys. Oceanogr.*, 34, 1036-1049.
398. 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. Verseghy, R. Vasic, Y. Xue, and T. Yamada, 2004: Regions of strong coupling between soil moisture and precipitation. *Science*, 305, 1138-1140.
399. **Manganello**, J., 2004: The Influence of Sea Surface Temperature Anomalies on Low-Frequency Variability of the North Atlantic Oscillation. *Ph.D. Dissertation*, George Mason University.
400. **Misra**, V., 2004: An evaluation of the predictability of the Austral summer seasonal precipitation over South America. *J. Climate*, 17, 1161-1175.
401. **Misra**, V., 2004: The teleconnection between western Indian and western Pacific Oceans. *Mon. Wea. Rev.*, 132, 445-455.
402. **Misra**, V. and M. Kanamitsu, 2004: Anomaly nesting: A methodology to downscale seasonal climate simulations from an AGCM. *J. Climate*, 17, 3249-3262.
403. Moon, B.-K., S.-W. **Yeh**, B. Dewitte, J.-G. Jhun, I.-S. Kang and B. P. **Kirtman**, 2004: Vertical structure and variability in the equatorial Pacific before and after the Pacific climate shift of the 1970s. *Geophys. Res. Lett.*, 31, doi:10.1029/2003GRL018829, 2004.
404. 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.
405. Rajendran, K., T. N. Krishnamurti, V. **Misra** and W.-K. Tao, 2004: An empirical cumulus parameterization scheme based on TRMM latent heating profiles. *J. Meteor. Soc. Japan*, 82, 989-1006
406. **Straus**, D. M., and F. Molteni, 2004: Circulation regimes and SST forcing: Results from large GCM ensembles. *J. Climate*, 17, 1641-1656.
407. **Wu**, Q., and D. M. **Straus**, 2004a: On the existence of hemispheric-wide climate variations. *J. Geophys. Res.*, 109, D06118 10.1029/2003JD004230.
408. **Wu**, Q., and D. M. **Straus**, 2004:b AO, COWL and observed climate trends, 2004: *J. Climate*, 17, 2139-2156.
409. **Wu**, R., and B. P. **Kirtman**, 2004: Impacts of the Indian Ocean on the Indian summer monsoon-ENSO relationship. *J. Climate*, 17, 3037-3054.
410. **Wu**, R., and B. P. **Kirtman**, 2004: Understanding the impacts of the Indian Ocean on ENSO variability in a coupled GCM. *J. Climate*, 17, 4019-4031.

## COLA REFEREED PUBLICATIONS 1993-Present

---

411. **Wu**, R., and B. P. **Kirtman**, 2004: The tropospheric biennial oscillation of the monsoon-ENSO system in an interactive ensemble coupled GCM. *J. Climate*, 17, 1623-1640.
412. **Wu**, Z., and N. E. Huang, 2004: A study of the characteristic of white noise using the Empirical Mode Decomposition method. *Proc. R. Soc. Lond. A*, 460, 1597-1611.
413. **Wu**, Z., and D. W. Moore, 2004: On the completeness of meridional eigenfunctions of tidal equation on an equatorial plane. *J. Atmos. Sci.*, 61, 769-774.
414. **Wu**, Z., E. K. **Schneider** and B. P. **Kirtman**, 2004: Causes of low frequency North Atlantic SST variability in a coupled GCM. *Geophys. Res. Lett.*, doi:10.1029/2004GL019548, 2004.
415. 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: The Sahelian climate. *Vegetation, Water, Humans and the Climate: A New Perspective on an Interactive System*. Springer Verlag, 59-78.
416. Yang, S., K.-M. Lau, S.-H. Yoo, J. L. **Kinter III**, K. Miyakoda and C.-H. Ho, 2004: Upstream subtropical signals preceding the Asian summer monsoon circulation. *J. Climate*, 17, 4213-4229.
417. **Yeh**, S.-W., J.-G. Jhun, I.-S. Kang and B. P. **Kirtman**, 2004: The ENSO decadal variability in a hybrid coupled model. *J. Climate*, 17, 1225-1238.
418. **Yeh**, S.-W., and B. P. **Kirtman**, 2004: The North Pacific oscillation-ENSO and internal atmospheric variability. *Geophys. Res. Lett.*, doi:10.1029/2004GL019983.
419. **Yeh**, S.-W., and B. P. **Kirtman**, 2004: The impact of internal atmospheric dynamics for the North Pacific SST variability. *Climate. Dyn.* doi:10.1007/s00382-004-0399-8.
420. **Yeh**, S.-W., and B. P. **Kirtman**, 2004: Decadal North Pacific SST variability and the associated global climate anomalies in a coupled GCM. *J. Geophys. Res.*, doi:10.1029/2004JD004785.
421. **Zhao**, M., and P. A. **Dirmeyer**, 2004: Pattern and trend analysis of temperature in a set of seasonal ensemble simulations. *Geophys. Res. Lett.*, 31, doi:10.1029/2003GL018579.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2003:

422. Bhatt, U. S., E. K. **Schneider**, and D. G. **DeWitt**, 2003: Impact of North American soil moisture variability on the re-emergence of SST anomalies in the North Atlantic. *Global and Planetary Change*, 37, 33-56.
423. 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.
424. **DelSole**, T., and P. Chang, 2003: Predictable component analysis, canonical correlation analysis, and autoregressive models. *J. Atmos. Sci.*, 60, 409-416.
425. **Dirmeyer**, P. A., 2003: The role of the land surface background state in climate predictability. *J. Hydrometeor.*, 4, 599-610.
426. **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.
427. **Dirmeyer**, P. A., M. J. **Fennessy** and L. **Marx**, 2003: Low skill in dynamical prediction of boreal summer climate: Grounds for looking beyond sea surface temperature. *J. Climate*, 16, 995-1002.
428. **Fennessy**, M. J. and J. L. **Kinter** III, 2011: Climatic Feedbacks During the 2003 European Heatwave. *J. Climate* (submitted).
429. **Gao** X., Huete, A.R., and Didan K., 2003, Multi-sensor comparisons and validation of MODIS vegetation indices at the semiarid Jornada Experimental Range, *IEEE Trans. Geosci. Remote Sens.*, 41, 2368-2381
430. **Guo**, Z.-C., D. H. Bromwich, and J. J. Cassano, 2003: Evaluation of Polar MM5 simulations of Antarctic atmospheric circulation. *Mon. Wea. Rev.*, 131, 384-411.
431. **Hu**, Z.-Z., S. Yang, and R. **Wu**, 2003: Long-term climate variations in China and global warming signals. *J. Geophys. Res.*, 108, 4616, doi:10.1029/2003JD003651.
432. Huete, A. R., Miura, T., and **Gao**, X., 2003, Land cover conversion and degradation analyses through coupled soil-plant biophysical parameters derived from hyperspectral EO-1 Hyperion, *IEEE Trans. Geosci. Remote Sens.*, 41, 1268-1276.
433. **Kirtman**, B. P., 2003: The COLA anomaly coupled model: Ensemble ENSO prediction. *Mon. Wea. Rev.*, 131, 2324-2341.
434. **Krishnamurthy**, V. and J. L. **Kinter** III, 2003: The Indian monsoon and its relationship to global climate variability. In *Global Climate: Current Research and Uncertainties in the Climate System*, X. Rodó and F. Comín, eds. (Springer-Verlag, Berlin, 286 pp), 186-236.
435. **Krishnamurthy**, V., and B. P. **Kirtman**, 2003: Variability of the Indian Ocean: Relation to Monsoon and ENSO. *Quart. J. Roy. Met. Soc.*, 129, 1623-1646.
436. **Misra**, V., 2003: The influence of Pacific SST on the precipitation over southern Africa diagnosed from an AGCM. *J. Climate*, 16, 2408-2418.
437. **Misra**, V., P. A. **Dirmeyer**, and B. P. **Kirtman**, 2003: Dynamical downscaling of seasonal simulations over South America. *J. Climate*, 16, 103-117.
438. Miyakoda, K., J. L. **Kinter** III and S. Yang, 2003: The role of ENSO in the south Asian monsoon and pre-monsoon signals over the Tibetan Plateau. *J. Meteor. Soc. Japan*, 81, 1015-1039.

## COLA REFEREED PUBLICATIONS 1993-Present

---

439. Nobre, P., S. E. Zebiak and B. P. **Kirtman**, 2003: Local and remote sources of tropical Atlantic variability as inferred from results of a hybrid ocean-atmosphere coupled model. *Geophys. Res. Lett.*, 30(5), 8008, doi:10.1029/2002GL015785, 2003.
440. **Schneider**, E. K., L. Bengtsson, and Z.-Z. **Hu**, 2003: Forcing of Northern Hemisphere climate trends. *J. Atmos. Sci.*, 60, 1504-1521.
441. **Straus**, D. M., D. **Paolino**, J. **Shukla**, S. Schubert, M. Suarez, A. Kumar, and P. Pegion, 2003: Predictability of the seasonal mean atmospheric circulation during autumn, winter and spring. *J. Climate*, 16, 3629-3649.
442. 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.
443. Vernekar, A. D., B. P. **Kirtman**, and M. J. **Fennessy**, 2003: A simulation of tropical South American summer climate variability with the NCEP Eta model. *J. Climate*, 16, 297-311.
444. Waliser, D. E., K. Jin, I.-S. Kang, W. F. Stern, S. D. Schubert, K.-M. Lau, M.-I. Lee, V. **Krishnamurthy**, A. Kitoh, G. A. Meehl, V. Y. Galin, V. Satyan, S. K. Mandke, G. Wu, Y. Liu, and C.-K. Park, 2003: AGCM simulations of intraseasonal variability associated with the Asian summer monsoon. *Climate Dyn.*, 21, 423-446
445. Wang, B., R. **Wu**, and T. Li, 2003: Atmosphere-warm ocean interaction and its impacts on the Asian-Australian monsoon variation. *J. Climate*, 16, 1195-1211
446. **Wu**, Q., and D. M. **Straus**, 2003: Multiple planetary flow regimes and the eddy forcing in Northern Hemisphere wintertime variability. *Geophys. Res. Lett.*, 30 (16), 1861-1865.
447. **Wu**, R., Z.-Z. **Hu**, and B. P. **Kirtman**, 2003: Evolution of ENSO-related rainfall anomalies in East Asia. *J. Climate*, 16, 3742-2758.
448. **Wu**, R., and B. P. **Kirtman**, 2003: On the impacts of the Indian summer monsoon on ENSO in a coupled GCM. *Quart. J. Roy. Meteor. Soc.*, 129B, 3439-3468.
449. **Wu**, R., and B. P. **Kirtman**, 2003: On the impacts of the Indian summer monsoon on ENSO in a coupled GCM. *Quart. J. Roy. Meteor. Soc.*, 129, 3439-3468.
450. **Wu**, R., and S.-P. Xie, 2003: On equatorial Pacific surface wind changes around 1977: NCEP-NCAR reanalysis versus COADS observation. *J. Climate*, 16, 167-173.
451. Yang, R., M. Kafatos, B. **Doty**, J. L. **Kinter** III, and L. Pham, 2003: A distributed enhanced server for multidimensional scientific data. *Computing Sci. Eng.*, 5, 44-52. [3]
452. **Yeh**, S.-W., and B. P. **Kirtman**, 2003: On the relationship between the interannual and decadal SST variability in the North Pacific and the Tropical Pacific Ocean. *J. Geophys. Res.*, 108(D11), 4344, doi:10.1029/2002JD002817, 2003.



## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2002:

453. **DelSole**, T., 2002: Entropy as a basis for comparing and blending forecasts. *Quart. J. Roy. Meteor. Soc.*, 128, 2469-2496
454. **DelSole**, T. and J. **Shukla**, 2002: Linear prediction of Indian monsoon rainfall. *J. Climate*, 15, 3645-3658.
455. Folland, C. and J. L. **Kinter** III, 2002: The Climate of the Twentieth Century Project. *CLIVAR Exchanges*, 7, 37-39.
456. **Huang**, B. and J. L. **Kinter** III, 2002: Interannual variability in the tropical Indian Ocean. *J. Geophys. Res.*, 107, doi:10.1029/2001JC001278.
457. Kang, I.-S., K. Jin, K.-M. Lau, J. **Shukla**, V. **Krishnamurthy**, V. Ya. Galin, S. D. Schubert, W. F. Stern, G. Wu, V. Satyan, A. Kitoh, G. A. Meehl, M. Ji, D. E. Waliser and J.-K. Kim, 2002: Intercomparison of atmospheric GCM simulated anomalies associated with the 1997-98 El Nino event. *J. Climate*, 15, 2791-2805
458. **Kinter** III, J. L., K. **Miyakoda** and S. Yang, 2002: Recent changes in the connection from the Asian monsoon to ENSO. *J. Climate*, 15, 1203-1215.
459. **Kirtman**, B. P., Y. **Fan** and E. K. **Schneider**, 2002: The COLA global coupled and anomaly coupled ocean-atmosphere GCM. *J. Climate*, 15, 2301-2320.
460. **Kirtman**, B. P., and J. **Shukla**, 2002: Interactive coupled ensemble: A new coupling strategy for CGCMs. *Geophys. Res. Lett.*, 29, DOI 10.1029/2002GL014834.
461. **Misra**, V., P. A. **Dirmeyer**, and 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.
462. **Misra**, V., P. A. **Dirmeyer**, B. P. **Kirtman**, H.-M. Juang and M. Kanamitsu, 2002: Regional simulation of interannual variability over South America. *J. Geophys. Res.*, 107, 8036, 10.1029/2001JD900216.
463. **Mo**, R., and D. M. **Straus**, 2002: Statistical-dynamical seasonal prediction based on principal component regression of GCM ensemble integrations. *Mon. Wea. Rev.*, 130, 2167-2187.
464. Reale, O. and P. A. **Dirmeyer**, 2002: Modeling the effect of land-surface evaporation variability on precipitation variability. Part I: General response. *J. Hydrometeor.*, 3, 433-450.
465. **Schneider**, E. K., 2002: The causes of differences between equatorial Pacific SST simulations of two coupled ocean-atmosphere general circulation models. *J. Climate*, 15, 449-469.
466. **Straus**, D. M. and J. **Shukla**, 2002: Does ENSO force the PNA? *J. Climate*, 15, 2340-2358.
467. **Verona**, M., 2002: The role of westerly wind bursts in the development of El Niño. *Ph.D. Dissertation*, George Mason University.
468. Xue, Y. and M. D. **Fennessy**, 2002: Under what conditions does land cover change impact regional climate. In *Global Desertification Do Humans cause deserts?* Reynolds, J.F., and D.M. Stafford Smith, eds. Dahlem University Press, Berlin, P 59-74.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2001:

469. Blackmon, M., B. Boville, F. Bryan, R. Dickinson, P. Gent, J. Kiehl, R. Moritz, D. Randall, J. **Shukla**, S. Solomon, G. Bonan, S. Doney, I. Fung, J. Hack, E. Hunke, J. Hurrell, J. Kutzbach, J. Meehl, B. Otto-Bliesner, R. Saravanan, E. K. Schneider, L. Sloan, M. Spall, K. Taylor, J. Tribbia, and W. Washington, 2001: The Community Climate System Model. *Bull. Amer. Meteor. Soc.*, 82, 2357-2376
470. 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
471. Chelton, D. B., S. K. Esbensen, M. G. Schlax, N. Thum, M. H. Freilich, F. J. Wentz, C. L. Gentemann, M. J. McPhaden, P. S. **Schopf**, 2001: Observations of coupling between surface wind stress and sea surface temperature in the eastern tropical Pacific. *J. Climate*, 14, 1479-1498.
472. **DelSole**, T., 2001: A theory for the forcing and dissipation in stochastic turbulence models. *J. Atmos. Sci.*, 58, 3762-3775.
473. **Dirmeyer**, P. A., 2001: An evaluation of the strength of land-atmosphere coupling. *J. Hydrometeor.*, 2, 329-344.
474. 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: Modeling root water uptake in hydrological and climate models. *Bull. Amer. Meteor. Soc.*, 82, 2797-2809.
475. Foufoula-Georgiou, E. and V. Vuruputur, 2001: Patterns and organization in precipitation. In *Spatial Patterns in Catchment Hydrology -Observations and Modeling*, R. Grayson and G. Blöschl, eds., Camb. Univ. Press, 432.
476. **Hu**, Z.-Z., L. Bengtsson, E. Roeckner, M. Christoph, A. Bacher, and J. Oberhuber, 2001: Impact of global warming on the interannual and interdecadal climate modes in a coupled GCM. *Climate Dyn.*, 17, 361-374
477. **Huang**, B. and J. L. **Kinter** III, 2002: Interannual variability in the tropical Indian Ocean. *J. Geophys. Res.*, 107, doi:10.1029/2001JC001278.
478. Jin, F.-F., Z.-Z. **Hu**, M. Latif, L. Bengtsson, and E. Roeckner, 2001: Dynamics and cloud-radiation feedbacks in El Nino and greenhouse warming. *Geophys. Res. Lett.*, 28, 1539-1542
479. Kang, I.-S., V. Ya. Galin, K. Jin, M. Kanamitsu, A. Kitoh, V. **Krishnamurthy**, K.-M. Lau, G. A. Meehl, V. Satyan, S. D. Schubert, J. **Shukla**, W. F. Stern, D. E. Waliser, B. Wang and G. Wu, 2001: Intercomparison of the climatological variations of Asian summer monsoon precipitation simulated by 10 GCMs. *Climate Dyn.*, 19, 383-395.
480. **Kirtman**, B. P., D. A. **Paolino**, J. L. **Kinter** III, and D. M. **Straus**, 2001: Impact of tropical sub-seasonal SST variability on seasonal mean climate simulations. *Mon. Wea. Rev.*, 129, 853-868.
481. **Kirtman**, B. P., J. **Shukla**, M. Balmaseda, N. Graham, C. Penland, Y. Xue, S. Zebiak, 2001: Current status of ENSO forecast skill. *World Climate Research Program (WRCP) Report*, 23/01, 26 pp.
482. 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. 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.

## COLA REFEREED PUBLICATIONS 1993-Present

---

484. Koster, R. D., P. A. **Dirmeyer**, A. N. Hahmann, R. Ijpelaar, L. Tyahla, P. Cox, and M. J. Suarez, 2001: Comparing the degree of land-atmosphere interaction in four atmospheric general circulation models. *J. Hydrometeor.*, 3, 363-375.
485. **Krishnamurthy**, V. and J. **Shukla**, 2001: Observed and model simulated interannual variability of the Indian monsoon. *Mausam*, 52, 133-150.
486. 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.
487. Mitchell, K., M. J. **Fennessy**, E. Rogers, J. **Shukla**, T. Black, J. **Kinter** III, F. Mesinger, Z. Janjic, and E. **Altshuler**, 2001: Simulation of North American Summertime Climate with the NCEP Eta Model Nested in the COLA GCM. *GEWEX Newsl.*, 11, No. 1, 3-6.
488. **Reale**, O., and R. Atlas, 2001: Tropical cyclone-like vortices in the extratropics: Observational evidence and synoptic analysis. *Wea. Forecasting*, 16, 7-34.
489. Schlosser, C. A., and P. A. **Dirmeyer**, 2001: Potential predictability of Eurasian snow cover. *Atmos. Sci. Let.*, 1, doi:10.1006/asle.2001.0037, <http://www.academicpress.com/asl>.
490. **Schneider**, E. K., 2001: The Causes of Differences Between Equatorial Pacific SST Simulations of Two Coupled Ocean-Atmosphere General Circulation Models. *J. Climate*, **15**, 449-469.
491. **Schneider**, E. K., 2001: Articles on Hadley Circulation, Walker Circulation, ITCZ, and Trade Winds. *Encyclopedia of Global Environmental Change. Volume I: The Earth system: physical and chemical dimensions of global environmental change*. MacCracken, M. C. and J. S. Perry (eds.). Wiley, London (in press).
492. **Shukla**, J. (ed.), 2001: *Dynamics of Large-Scale Atmospheric and Oceanic Processes: Selected Papers of Jule Gregory Charney*. A. Deepak Publ. (Hampton, VA, 611 pp).
493. Wajsowicz, R. C. and E. K. **Schneider**, 2001: The Indonesian throughflow's effect on global climate determined from the COLA coupled climate system. *J. Climate*, 14, 3029-3042.
494. Wajsowicz, R. C. and P. S. **Schopf**, 2001: Oceanic influences on the seasonal cycle in evaporation over the Indian Ocean. *J. Climate*, 14, 1199-1226.
495. **Zhu**, Z., E. K. **Schneider**, and B. **Huang**, 2001: Experimental ENSO predictions with a CGCM: A comparison of two different approaches. *Dynamics of Atmospheric and Oceanic Circulation and Climate*. Eds: Wang and Huang, China Meteorological Press, Beijing, China, 819-840

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 2000:

496. **Bamzai**, A. S. and L. **Marx**, 2000: COLA AGCM simulation of the effect of anomalous spring snow over Eurasia on the Indian summer monsoon. *Quart. J. Roy. Meteor. Soc.*, 126, 2575-2584.
497. Borovikov, A., M. Rienecker, and P.S. **Schopf**, 2000: Mechanism for surface warming in the equatorial Pacific Ocean during 1994-95. *J. Climate*, 14, 2624-2641.
498. Covey, C., A. Abe-Ouchi, G. J. Boer, G. M. Flato, B. A. Boville, G. A. Meehl, U. Cubasch, E. Roeckner, H. Gordon, E. Guilyardi, L. Terray, X. Jiang, R. Miller, G. Russell, T. C. Johns, H. Le Treut, L. Fairhead, G. Madec, A. Noda, S. B. Power, E. K. **Schneider**, R. J. Stouffer, and J. -S. von Storch, 2000: The seasonal cycle in coupled ocean-atmosphere general circulation models. *Climate Dyn.*, 16, 775-787.
499. **DelSole**, T., 2000: A fundamental limitation of Markov models. *J. Atmos. Sci.*, 57, 2158-2168.
500. DeWitt, D. G., and E. K. **Schneider**, 2000: The tropical ocean response to a change in orbital forcing. *J. Climate*, 13, 1133-1149.
501. **Dirmeyer**, P. A., 2000: Using a global soil wetness data set to improve seasonal climate simulation. *J. Climate*, 13, 2900-2922
502. **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.
503. **Fan** Y., M. R. Allen, D. L. T. Anderson and M. A. Balmaseda, 2000: How predictability depends on the nature of uncertainty in initial conditions in a coupled model of ENSO. *J. Climate*, 13, 3298-3313.
504. **Fennessy**, M. J. and J. **Shukla**, 2000: Seasonal atmospheric prediction over North America with a regional model nested in a global model. *J. Climate*, 13, 2605-2627.
505. **Hu**, Z.-Z., L. Bengtsson and K. Arpe, 2000: Impact of global warming on the Asian winter monsoon in a coupled GCM. *J. Geophys. Res.*, 105, 4607-4624.
506. **Hu**, Z.-Z., M. Latif, E. Roeckner, and L. Bengtsson, 2000: Intensified Asian summer monsoon and its variability in a coupled model forced by increasing greenhouse gas concentrations. *Geophys. Res. Lett.*, 27, 2681-2684.
507. **Kirtman**, B. P., and E. K. **Schneider**, 2000: A spontaneously generated atmospheric general circulation. *J. Atmos. Sci.*, 57, 2080-2093.
508. **Krishnamurthy**, V. and B. N. Goswami, 2000: Indian monsoon-ENSO relationship on interdecadal time scale. *J. Climate*, 13, 579-595.
509. **Krishnamurthy**, V. and J. **Shukla**, 2000: Intraseasonal and interannual variability of rainfall over India. *J. Climate*, 13, 4366-4377.
510. **Reale**, O. and P. A. **Dirmeyer**, 2000: Modeling the effects of vegetation on Mediterranean climate during the Roman classical period. Part I: History and model sensitivity. *Global Planet. Change*, 25, 163-184.
511. **Schlosser**, C. A. and Co-authors, 2000: Simulations of boreal grassland hydrology at Valdai, Russia: PILPS Phase 2 (d). *Mon. Wea. Rev.*, 128, 301-321.
512. **Schneider**, E. K. and U. S. **Bhatt**, 2000: A dissipation integral with application to ocean diffusivities and structure. *J. Phys. Oceanogr.*, 30, 1158-1171.
513. **Shukla**, J., J. Anderson, D. Baumhefner, C. Brankovic, Y. Chang, E. Kalnay, L. **Marx**, T. Palmer, D. A. **Paolino**, J. Ploshay, S. Schubert, D. M. Straus, M. Suarez, J. Tribbia, 2000: Dynamical Seasonal Prediction, *Bull. Amer. Meteor. Soc.*, 81, 2593-2606.

## COLA REFEREED PUBLICATIONS 1993-Present

---

514. **Shukla, J., D. A. Paolino, D. M. Straus, D. G. DeWitt, M. J. Fennessy, J. L. Kinter III, L. Marx and R. Mo**, 2000: Dynamical seasonal predictions with the COLA atmospheric model. *Quart. J. Royal Meteor. Soc.*, 126, 2265-2291.
515. **Straus, D. M., and R. S. Lindzen**, 2000: Planetary scale baroclinic instability and the MJO. Submitted to *J. Atmos. Sci.* 57, 3609-3626.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1999:

516. **Bamzai**, A. S. and J. **Shukla**, 1999: Relation between Eurasian snow cover, snow depth, and the Indian summer monsoon: An observational study. *J. Climate*, 12, 3117-3132.
517. Carsteanu, A., V. **Vuruputur**, and E. Foufoula-Georgiou, 1999: Event-specific multiplicative cascade models and an application to rainfall. *J. Geophys. Res.*, 104, 31611-31622.
518. D'Andrea, F., S. Tibaldi, M. Blackburn, G. Boer, M. Déqué, M. R. Dix, B. Dugas, L. Ferranti, T. Iwasaki and A. Kitoh, V. Pope, D. Randall, E. Roeckner, D. **Straus**, W. Stern, H. van den Dool, D. Williamson, 1999: Northern Hemisphere atmospheric blocking as simulated by 15 atmospheric general circulation models in the period 1979-1988. *Climate Dyn.*, 14, 385-407, doi: 10.1007/s003820050230.
519. **DelSole**, T., 1999: Stochastic models of shear-flow turbulence with enstrophy transfer to subgrid scales. *J. Atmos. Sci.*, 56, 3692-3703.
520. **DelSole**, T. and A. Hou, 1999: Empirical correction of a dynamical model. Part I: Fundamental issues. *Mon. Wea. Rev.*, 127, 2533-2545.
521. **Dirmeyer**, P. A. 1999: Assessing GCM sensitivity to soil wetness using GSWP data. *J. Meteor. Soc. Japan*, 78, 367-385.
522. **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.
523. **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.
524. **Dirmeyer**, P. A., and F. J. **Zeng**, 1999: SSiB sensitivity to infiltration and treatment of convective precipitation. *J. Meteor. Soc. Japan*, 78, 291-303.
525. **Fennessy**, M. J. and J. **Shukla**, 1999: Impact of initial soil wetness on seasonal atmospheric prediction. *J. Climate*, 12, 3167-3180
526. Goswami, B. N., V. **Krishnamurthy**, and H. Annamalai, 1999: A broad scale circulation index for the interannual variability of the Indian summer monsoon. *Quart. J. Roy. Meteor. Soc.*, 125, 611-633.
527. Oki, T., T. Nishimura, and P.A. **Dirmeyer**, 1999: Assessment of annual runoff from land surface models using Total Runoff Integrating Pathways (TRIP). *J. Meteor. Soc. Japan*, 78, 235-255.
528. Pitman, A. J. and Co-authors (including **Schlosser**), 1999: Key results and implications from phase (1c) of the Project for the Intercomparison of Land-Surface Parameterizations Schemes. *Climate Dynamics*, 15, 673-684.
529. **Schneider**, E. K., B. **Huang**, Z. **Zhu**, D. G. **DeWitt**, J. L. **Kinter III**, B.P. **Kirtman**, and J. **Shukla**, 1999: Ocean data assimilation, initialization and prediction of ENSO with a coupled GCM. *Mon. Wea. Rev.*, 127, 1187-1207.
530. **Shukla**, J., J. L. **Kinter III**, E. K. **Schneider**, and D. M. **Straus**, 1999: Analysis and Modeling of the Climate System: Modeling. *Climate Change: An Integrated Perspective*. Open University, Heerlen, NL (414 pp).
531. **Straus**, D. M. and P. Ditlevsen, 1999: Two dimensional turbulence properties of the ECMWF reanalyses. *Tellus*, 51, 749-772.
532. **Vuruputur**, V., E. Foufoula-Georgiou and V. Sapozhnikov, 1999: A space-time downscaling model for rainfall. *J. Geophys. Res.*, 104, 19705-19721.

## COLA REFEREED PUBLICATIONS 1993-Present

---

533. **Vuruputur** V., E. Foufoula-Georgiou and V. Sapochnikov, 1999: Evidence of dynamic scaling in space-time rainfall, *J. Geophys. Res.*, 104, 31599-31610.
534. Wood, E.F., ..., C.A. **Schlosser**, and co-authors, 1999: The Project for the Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2c Red- Arkansas river basin experiment: 1. experiment description summary intercomparisons. *Global Planet. Change* 19, 115-136
535. Yang, S., K-M. Lau, and P. S. **Schopf**, 1999: Sensitivity of the tropical Pacific Ocean to precipitation induced freshwater flux. *Climate Dyn.*, 15, 737-750.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1998:

536. **Dirmeyer**, P.A. 1998: Land-sea geometry and its effect on monsoon circulations. *J. Geophys. Res.*, **103**, 11, 555-11,572.
537. **Huang**, B., **Z. Zhu**, **D.G. DeWitt**, **J. Shukla** and **E. K. Schneider**, 1998: SST predictions with a global coupled GCM. *Experimental Long-Lead Forecast Bulletin*, **7**, 17-20.
538. **Kirtman**, B. P., and **P. S. Schopf**, 1998: Decadal variability in ENSO predictability and prediction. *J. Climate*, **11**, 2804-2822.
539. **Konchady**, M., **A. Sood** and **P.S. Schopf**, 1998: Implementation and performance evaluation of a parallel ocean model. *Parallel Computing*, **24**, 181-203.
540. **Latif**, M., **D. Anderson**, **T. Barnett**, **M. Cane**, **R. Kleeman**, **A. Leetmaa**, **J. O'Brien**, **A. Rosati**, and **E.K. Schneider**, 1998: A review of the predictability and prediction of ENSO. *J. Geophys. Res.*, **103**, 14375-14,394.
541. **Liang**, X., ..., **C.A. Schlosser**, and co-authors, 1998: The Project for the Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2c Red-Arkansas river basin experiment: 2. Spatial and temporal analysis of water fluxes. *Glob. Planet. Change*, **19**, 137-160.
542. **Lohmann**, D., ..., **C.A. Schlosser**, and co-authors, 1998: The Project for the Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2c Red-Arkansas river basin experiment: 3. spatial and temporal analysis of water fluxes. *Glob. Planet. Change*, **19**, 161-180.
543. **Polcher**, J., ..., **C.A. Schlosser**, and co-authors, 1998: A proposal for a general interface between land-surface schemes and general circulation models. *Glob. Planet. Change*, **19**, 261-276.
544. **Robock**, A., **C.A. Schlosser**, **K.Y. Vinnikov**, **N.A. Speranskaya**, **J.K. Entin**, 1998: Evaluation of AMIP soil moisture simulations. *Glob. Planet. Change*, **19**, 181-208.
545. **Schneider**, E. K. and **Z. Zhu**, 1998: Sensitivity of the simulated annual cycle of the sea surface temperature in the equatorial Pacific to sunlight penetration. *J. Climate*, **11**, 1932-1950.
546. **Schneider**, E. K., **Z. Zhu**, **B. Huang**, **D.G. DeWitt**, and **J. Shukla**, 1998: SST predictions with a global coupled GCM. *Experimental Long-Lead Forecast Bulletin*, **7**, No. 2, 6-9.
547. **Schulz**, J.P., **L. Dumenil**, **J. Polcher**, **C.A. Schlosser**, and **Y. Xue**, 1998: Land surface energy and moisture fluxes: comparing three models. *J. Appl. Meteor.*, **37**, 288-307.
548. **Shukla**, J., 1998: Predictability in the midst of chaos: a scientific basis for climate forecasting. *Science*, **282**, 728-731.
549. **Straus**, D.M., and **Y. Yi**, 1998: Interactions of synoptic and planetary waves: scale-dependant forcing of a GCM. *Mon Wea. Rev.*, **126**, 876-894.
550. **Wood**, E.F., ..., **C.A. Schlosser**, and co-authors, 1999: The Project for the Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2c Red- Arkansas river basin experiment: 1. experiment description summary intercomparisons. *Glob. Planet. Change* **19**, 115-136.
551. **Xue**, Y. and **J. Shukla**, 1998: Model simulation of the influence of global SST anomalies on Sahel rainfall. *Mon. Wea. Rev.*, **126**, 2782-2792.
552. **Xue**, Y., **F. J. Zeng**, **C. A. Schlosser**, and **S. J. Allen**, 1998: The simplified simple biosphere, model and its application to land-atmosphere interactions. *Chinese J. Atmos. Sci.*, **22**, 575-586.
553. **Zhu**, Z., **B. Huang**, **D.G. DeWitt**, **J. Shukla**, and **E. K. Schneider**, 1998: SST Predictions with a Global Coupled GCM. *Experimental Long Lead Forecast Bulletin*, **7**, No. 4, 14-17.



## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1997:

554. **Bamzai**, A.S., 1997: *Observational and modeling study of snow its relation to the Indian summer monsoon*. Ph.D. Dissertation, George Mason University.
555. Chen T.H. and Collaborators (including Y. **Xue**), 1997: Cabauw experimental results from the project for intercomparison of land surface parameterization schemes. *J. Climate*, **10**, 1194-1215.
556. **Fennessy**, M. J. and Y. **Xue**, 1997: Impact of USGS vegetation map on GCM simulations over the United States. *Ecol. Appl.* **7**, 22-23.
557. **Huang**, B., and J. **Shukla**, 1997a: An examination of the AGCM simulated surface wind stress and low level winds over tropical Pacific. *Mon. Wea. Rev.*, **125**, 985-998.
558. **Huang**, B. and J. **Shukla**, 1997b: Characteristics of the interannual and decadal variability in a general circulation model of the tropical Atlantic Ocean. *J. Phys. Oceanogr.*, **27**, 1693-1712.
559. **Kirtman**, B. P., 1997: Oceanic Rossby wave dynamics and the ENSO period in a coupled model. *J. Climate*, **10**, 1690-1704.
560. **Kirtman**, B. P. and D. G. **DeWitt**, 1997: Comparison of atmospheric model wind stress with three different convective parameterizations: Sensitivity of tropical Pacific Ocean simulations. *Mon. Wea. Rev.*, **125**, 1231-1250.
561. **Kirtman**, B.P., J. **Shukla**, B. **Huang**, Z. **Zhu** and E.K. **Schneider**, 1997: Multi-seasonal predictions with a coupled tropical ocean global atmosphere system. *Mon. Wea. Rev.*, **125**, 789-808.
562. **Kirtman**, B.P. and S.E. Zebiak, 1997: ENSO simulation and prediction with a hybrid coupled model. *Mon. Wea. Rev.*, **125**, 2620-2641.
563. Oki, T., T. Nishimura, and P.A. **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.
564. **Schlosser**, C.A., A. Robock, K.Y. Vinnikov, N.A. Speranskaya, and Y. **Xue**, 1997: 18 year land surface hydrology model simulations for a midlatitude grassland catchment in Valdai, Russia. *Mon. Wea. Rev.*, **125**, 3279-3296.
565. **Schneider**, E.K., R.S. Lindzen and B.P. **Kirtman**, 1997: A tropical influence on global climate. *J. Atmos. Sci.*, **54**, 1349-1358.
566. **Schneider**, E.K., Z. **Zhu**, B.S. Giese, B. **Huang**, B.P. **Kirtman**, J. **Shukla**, and J.A. Carton, 1997: Annual cycle and ENSO in a couple ocean-atmosphere model. *Mon. Wea. Rev.*, **125**, 680-706.
567. **Straus**, D.M. and J. **Shukla**, 1997: Variations of mid-latitude transient dynamics associated with ENSO. *J. Atmos. Sci.* **54**, 777-790.
568. **Straus**, D.M. and Q. **Yang**, 1997: Vertical structure and dominant horizontal scales of baroclinic waves in the NASA DAO and NCEP reanalysis. *Mon. Wea. Rev.*, **125**, 3266-3278.
569. **Xue**, Y., 1997: Biosphere feedback on regional climate in tropical north Africa. *Quart. J. Roy. Meteor. Soc.*, **123**, 1483-1516.
570. **Xue**, Y., P.J. Sellers, F.J. **Zeng**, and C.A. **Schlosser**, 1997: Comments on "Use of Russian soil moisture and meteorological observations to validate soil moisture simulations with biosphere and bucket models". *J. Climate*, **10**, 374-376.
571. **Zhu**, Z., 1997: Precipitation and water vapor transport simulated by a hybrid isentropic-sigma GCM. *J. Climate*, **10**, 988-1003.

## COLA REFEREED PUBLICATIONS 1993-Present

---

572. **Zhu**, Z. and E.K. Schneider, 1997: Improvement in stratosphere and upper-troposphere simulation with a hybrid isentropic-sigma coordinate GCM. *Quart. J. Roy. Meteor. Soc.*, 123, 2095-2114.

---

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1996:

573. **Chen**, F. and M. Ghil, 1996: Interdecadal variability in a hybrid coupled ocean-atmosphere model. *J. Phys. Oceanogr.*, **26**, 1561-1578.
574. **DeWitt**, D.G., E.K. **Schneider**, and A.D. Vernekar, 1996: Factors determining the precipitation distribution and low level flow in the tropics of an atmospheric general circulation model: Diagnostic studies. *J. Atmos. Sci.*, **53**, 2247-2263.
575. **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.
576. **Kirtman**, B.P. and E. K. **Schneider**, 1996: Model based estimates of equatorial zonal wind stress. *J. Climate*, **9**, 1077-1091.
577. Nobre, P. and J. **Shukla**, 1996: Variations of sea surface temperature, wind stress, and rainfall over the tropical Atlantic and South America. *J. Climate*, **9**, 2464-2479.
578. **Reale**, O., 1996: *Modeling the Effects on Climate Caused by the Changes in Vegetation from the Roman Classical Period*. Ph.D. Dissertation, University of Maryland.
579. **Schneider**, E.K., 1996: Flux correction and the simulation of changing climate. *Ann. Geophys.*, **14**, 336-341.
580. **Tanajura**, C., 1996: *Modeling and Analysis of the South American Summer Climate*. Ph.D. Dissertation, University of Maryland.
581. Wetzol, P.J., X. Liang, P. Irannejad, A. Boone, J. Nolihan, Y. Shao, C. Skely, Y. **Xue**, and Z.-l. Yang, 1996: Modeling vadose zone liquid water fluxes: infiltration, runoff, drainage, interflow. *Global & Planetary Change*, **13**, 57-72.
582. **Xue**, Y., 1996: The impact of desertification in the Mongolian and the Inner Mongolian grassland on the east Asian monsoon. *J. Climate*, **9**, 2173-2189.
583. **Xue**, Y. and J. **Shukla**, 1996: The influence of land surface properties on Sahel climate. Part II: Afforestation. *J. Climate*, **9**, 3260-3275.
584. **Xue**, Y., J. Zeng and C.A. **Schlosser**, 1996: SSIB and its sensitivity to soil properties - a case study using HAPEX-Mobilhy data. *Global & Planetary Change*, **13**, 183-194.
585. **Xue**, Y., M. J. **Fennessy** and P.J. Sellers, 1996: Impact of vegetation properties on U.S. summer weather prediction. *J. Geophys. Res.*, **101**, D3, 7419-7430.

---

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1995:

586. **Chen**, F. and M. Ghil, 1995: Interdecadal variability of the thermohaline circulation and high-latitude surface fluxes. *J. Phys. Oceanogr.*, **25**, 2547-2568.
587. **Chen**, F., K. Mitchell, J. Schaake, Y. Xue, H.L. Pan, V. Koren, Q. Duan and A. Betts, 1995: Modeling of land-surface evaporation by four schemes and comparison with FIFE observations. *J. Geophys. Res.*, **101**, D3, 7251-7268.
588. **Dirmeyer**, P.A. 1995: Problems in initializing soil wetness. *Bull. Amer. Meteor. Soc.*, **76**, 2234-2240.
589. **Doty**, B.E. and J. L. **Kinter** III, 1995: Geophysical Data Analysis and Visualization using GrADS. *Visualization Techniques in Space and Atmospheric Sciences*, eds. E.P. Szuszcwicz and J.H. Bredekamp. (NASA, Washington, D.C.), 209-219.
590. Goswami, B.N., V. **Krishnamurthy**, and N.H. Saji, 1995: Simulation of ENSO-related surface winds in the tropical Pacific by an atmospheric general circulation model forced by observed sea surface temperatures. *Mon. Wea. Rev.*, **123**, 1677-1694.
591. **Huang**, B., J. A. Carton, and J. **Shukla**, 1995: A numerical simulation of the variability in the tropical Atlantic Ocean, 1980-1988. *J. Phys. Oceanogr.*, **25**, 835-854.
592. **Huang**, B., and E. K. **Schneider**, 1995: The response of an ocean general circulation model to surface wind stress produced by an atmospheric general circulation model. *Mon. Wea. Rev.* **123**, 3059 - 3085.
593. **Kirtman**, B. P., B. **Huang**, J. **Shukla** and Z. **Zhu**, 1995: Tropical Pacific SST predictions with a coupled GCM. *Experimental Long-Lead Forecast Bulletin*, **4**, No. 1, 1-5.
594. Lindzen, R. S., B. P. **Kirtman**, D. Kirk-Davidoff and E. K. **Schneider**, 1995: Seasonal surrogates for climate. *J. Climate*, **8**, 1681-1684.
595. Mahfouf, J. F., J. Noilhan, C. Ciret, P. Thornton, Z. L. Yang, Y. **Xue**, Y. Shao, P. Irannejad, A. Haxeltine, 1995: Analysis of results from PILPS-RICE workshop, Part III: Transpiration. *Global & Planetary Change*, **13**, 73-88.
596. Mechoso, C.R., A.W. Robertson, N. Barth, M.K. Davey, P. Delecluse, B.P. **Kirtman**, M. Latif, T. Nagai, S. Philander, P.A. **Schopf**, T. Stockdale, M. Suarez, O. Thual, J. Tribbia, 1995: The seasonal cycle over the tropical Pacific in general circulation models. *Mon. Wea. Rev.*, **123**, 2825-2838.
597. **Paolino**, D. A., Q. **Yang**, B. E. **Doty**, J. L. **Kinter** III, J. **Shukla**, D. M. **Straus**, 1995: Results of a pilot reanalysis project at COLA. *Bull. Amer. Meteor. Soc.*, **76**, 697-710.
598. **Peng**, P., 1995: *Dynamics of Stationary Wave Anomalies*. Ph.D. Dissertation, University of Maryland.
599. Robock, A., K. V. Vinnikov, C.A. **Schlosser**, N.A. Speranskaya and Y. **Xue**, 1995: Use of Russian soil moisture and meteorological observations to validate soil moisture simulations with biosphere and bucket models. *J. Climate*, **8**, 15-35.
600. **Schneider**, E. K., B. **Huang**, J. **Shukla**, 1995: Ocean wave dynamics and El Niño. *J. Climate*, **8**, 2415-2439.
601. **Shukla**, J., 1995: On the initiation and persistence of the Sahel drought. *Natural Climate Variability on Decade to Century Time Scales* (National Academy Press, Washington, DC), 44-48.
602. **Xue**, Y., H. G. Bastable, P. A. **Dirmeyer**, and P.J. Sellers, 1995: Sensitivity of simulated surface fluxes to changes in land surface parameterizations. *J. Appl. Meteor.*, **35**, 386-400.

## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1994:

603. Carton, J. A. and B. **Huang**, 1994: Warm events in the tropical Atlantic. *J. Phys. Oceanogr.*, **24**, 888-903.
604. **Dirmeyer**, P. A., 1994: Vegetation stress as a feedback mechanism in midlatitude drought. *J. Climate*, **7**, 1463-1483.
605. **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.
606. Doddridge, B. G., P. A. **Dirmeyer**, J. T. Merrill, S. J. Oltmans, and R. R. Dickerson, 1994: Interannual variability over 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.
607. **Fennessy**, M.J., J. L. **Kinter** III, B. P. **Kirtman**, L. **Marx**, S. Nigam, E. K. **Schneider**, J. **Shukla**, D. M. **Straus**, A. D. Vernekar, Y. **Xue** and J. Zhou, 1994: The simulated Indian monsoon: A GCM sensitivity study. *J. Climate*, **7**, 33-43.
608. **Schneider**, E. K., and J.L. **Kinter** III, 1994: An examination of internally generated variability in long climate simulations. *Climate Dyn.*, **10**, 181-204.
609. **Straus**, D. M. and M. A. **Huntley**, 1994: Interactions between moist heating and dynamics in atmospheric predictability. *J. Atmos. Sci.*, **51**, 447-464.
610. Vernekar, A. D., J. Zhou and J. **Shukla**, 1994: The effect of Eurasian snow cover on the Indian monsoon. *J. of Climate*, **8**, 248-266.
611. **Yang**, R., M. J. **Fennessy** and J. **Shukla**, 1994: The influence of initial soil wetness on medium range surface weather forecasts, *Mon. Wea. Rev.*, **122**, 471-485.
612. **Yang**, R., J. **Shukla** and P. J. Sellers, 1994: The influence of changes in vegetation type on the surface energy budget. *Adv. Atmos. Sci.*, **11**, 139-161.

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## COLA REFEREED PUBLICATIONS 1993-Present

---

### 1993:

613. **Dirmeyer**, P. A. and J. **Shukla**, 1993: Observational and modeling studies of the influence of soil moisture anomalies on atmospheric circulation. *Prediction of Interannual Climate Variations* (ed. by J. Shukla), NATO Series I, Vol. **6**, Springer-Verlag, 1-23.
614. Goswami, B. N. and J. **Shukla**, 1993: Aperiodic variability in the Cane-Zebiak model: A diagnostic study. *J. Climate*, **5**, 628-638.
615. **Kinter III**, J. L. and B. E. **Doty**, 1993: The Grid Analysis and Display System - A practical desktop tool for analyzing geophysical data. *Information Systems Newsletter*, **27** (NASA, OSSA, JPL, Pasadena, CA).
616. **Kirtman**, B. P. and A. D. Vernekar, 1993: A note on wave-CISK and the evaporation-wind feedback for the Madden-Julian Oscillation. *J. Atmos. Sci.*, **50**, 2812-2814.
617. **Kirtman**, B. P., A. D. Vernekar, D.G. **DeWitt**, and J. Zhou, 1993: Impact of orographic gravity wave drag on extended-range forecasts with the COLA GCM, *Atmosfera*, **6**, 3-24.
618. Robinson, A. R., C. J. Garrett, P. Malanotte-Rizzoli, S. Manage, S. G. Philander, N. Pinardi, W. Roether, F. A. Schott and J. **Shukla**, 1993: Mediterranean and Global Ocean and Climate Dynamics. *EOS Transactions*, American Geophysical Union, Vol. 74, No. 44, 506-507.
619. **Shukla**, J. 1993: Predictability of short-term climate variations. *Prediction of Interannual Climate Variations*. NATO ASI Series I: Global Environmental Change, **Vol. 6**, Editor: J. Shukla, 217-232.
620. **Straus**, D. M., 1993: The midlatitude development of regional errors in a global GCM. *J. Atmos. Sci.*, **50**, 2785-2799.
621. Vernekar, A. D., V. Thapliyal, R. H. Kripalani, S. V. Singh and B. P. **Kirtman**, 1993: Global structure of the Madden-Julian Oscillation during two recent contrasting summer monsoon seasons over India. *Meteor. and Atmos. Phys.*, **52**, 37-47.
622. **Xue**, Y., 1993: The influence and mechanisms of biosphere feedback on African climate. In *Macroscale Modeling of the Hydrosphere* (ed. W. B. Wilkinson) Int. Assoc. Hydrol. Sci. (IAHS) Pub. No. 214, 119-124.
623. **Xue**, Y. and J. **Shukla**, 1993: The influence of land surface properties on Sahel climate. Part I: Desertification. *J. Climate*, **6**, 2232-2245.