

JAMES L. KINTER

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Dr. Kinter is Chair of the Atmospheric, Oceanic and Earth Sciences (AOES) department at George Mason University, with responsibility for all academic and administrative aspects of the department. He is also Director of the Center for Ocean-Land-Atmosphere Studies (COLA) where he directs basic and applied climate research conducted by the Center. Dr. Kinter's research includes studies of atmospheric dynamics and predictability on intra-seasonal and longer time scales, particularly the prediction of Earth's climate using numerical models of the coupled ocean-atmosphere-land system. Dr. Kinter is a tenured Professor of Climate Dynamics in the AOES department of the College of Science at George Mason University, where he has responsibilities for curriculum development, teaching atmospheric dynamics and climate change, and advising Ph.D. students.

PROFESSIONAL PREPARATION:

- 1983-1984 Post-doctoral: National Research Council Associate – NASA Goddard, Greenbelt, MD. Mentor: J. Shukla.
- 1984 Ph.D. (Geophysical Fluid Dynamics) Princeton University, Princeton, NJ. Dissertation: *Barotropic Studies of Stationary, Extratropical Anomalies in the Troposphere*. Advisor: K. Miyakoda, NOAA Geophysical Fluid Dynamics Laboratory.
- 1981 M.A. (Geophysical Fluid Dynamics) Princeton University, Princeton, NJ.
- 1979 A.B. (Mathematics) Princeton University, Princeton, NJ.
Thesis: *Exchange Economy Analysis: A Comparison of Measure-Theoretic and Non-Standard Techniques*. Advisor: R. Anderson (Depts. of Mathematics and Economics).

APPOINTMENTS:

- Aug2011-present Professor of Climate Dynamics – Dept. of Atmospheric, Oceanic and Earth Sciences, College of Science (COS), George Mason University (GMU)
- Aug2014-present Director - Center for Ocean-Land-Atmosphere Studies (COLA), COS, GMU
- Jan2005-Jul2015 Director and Senior Research Scientist - COLA, Institute of Global Environment and Society (IGES)
- Aug2005-Jul2011 Associate Professor of Climate Dynamics – Department of Atmospheric, Oceanic and Earth Sciences, College of Science, GMU
- Aug1993-Jul2005 Executive Director and Associate Research Scientist – COLA, IGES
- Aug1987-Jul1993 Assistant Research Scientist and Assistant Director - Center for Ocean-Land-Atmosphere Interactions, Dept. of Meteorology, University of Maryland at College Park (UMCP)
- Aug1984-Jul1987 Assistant Professor – Dept. of Meteorology, UMCP
- Aug1983-Jul1984 National Research Council Associate - Goddard Laboratory for Atmospheric Sciences, Goddard Space Flight Center, National Aeronautics and Space Administration (NASA)

AWARDS

Fellow, American Meteorological Society (2011)

PROFESSIONAL AND COMMUNITY SERVICE:

Scientific Study and Advisory Committees:

Advisory Council, GMU Institute for a Sustainable Earth (2019 – present)
Scientific Programme Committee (SPC), Joint Satellite Conference (2019)
NOAA Community Modeling review Committee (Co-chair, 2018-present)
NOAA NWS System Architecture and Infrastructure Working Group (Co-chair, 2016-present)
NCAR Advisory Panel (2016-present; Chair 2018-present)
NAS/NRC Review Comm. on USGCRP Climate Science Special Report (2016-2017)
American Meteorological Society Council (elected 2015-2019)
NASA Advisory Council, Science Committee, Ad Hoc Big Data Task Force (2015-2018)
NUIST Earth System Modeling Center Scientific Advisory Committee (2015-present)
NCAR Blue Ribbon Panel (2014)
NOAA MAPP Model Development Task Force (member 2014-2018)
NOAA MAPP Climate Prediction Task Force (member 2013-2018)
NOAA MAPP CMIP5 Task Force (Chair, 2012-2014; member 2011-2014)
NAS/NRC Review Comm. on NSF AGS Draft Goals and Objectives (member, 2013-2014)
NAS/NRC Study Comm. National Strategy for Advancing Climate Modeling (2010–2012)
UCAR Community Advisory Committee for NCEP (Co-Chair, 2011-2015)
USGCRP Strategic Planning Workshop (Chair, 2010)
Journal of Advances in Modeling Earth Systems (Publisher, 2009-2010)
National Science Foundation Advisory Committee for the Geosciences (2005 – 2009)
NSF Working Group on Geosciences Strategic Planning (2007-2009)
Community Earth System Model (CESM) Advisory Board (2007-present)
NOAA Climate Test Bed Scientific Advisory Board (2005 – 2014)
Advisory Board, Journal of Advances in Modeling of Earth Systems (Chair, 2008-2011)
NOAA Appl. Research Centers Directors Council (Chair, 2007-2008, member 2005-2010)
Earth System Modeling Framework Scientific Advisory Board (2007-2009)
International Climate of the 20th Century Project (Co-Chair, 1998-present)
Catalan Center for Climate Sciences Scientific Advisory Committee (member, 2006-2015)
World Climate Research Committee Modeling Panel (2005)
U.S. Global Change Research Program Study Group on the Water Cycle (1999-2001)
27th Climate Diagnostics and Prediction Workshop (Co-Chair, 2002)
Dynamics & Statistics of Secular Climate Variations Workshop, ICTP (Co-Chair, 1995)
NASA Applied Info. Systems Research Workshops (22-24 July 1991, 11-13 August 1992)
Workshop on 1988 U.S. Drought, University of Maryland (Co-Chair, 1990)
Ad-Hoc Panel on Reanalysis for Tropical Ocean Global Atmosphere program (1989)
NAS Board on Atmos. Sciences & Climate, Panel on Model Assimilated Data Sets (1989)
Atmospheric Forcing of Ocean Circulation Workshop, Inst. for Naval Oceanogr. (1987)

Computer-Related Activities:

Chair, TeraGrid Science Advisory Committee (2008 – 2010, member 2008 – 2011)
NSF Advisory Comm. for Cyberinfrastructure (member, 2006 – 2010)
NSF ACCI Grand Challenges & Virtual Organizations Task Group (member, 2009-2010)
NSF ACCI High-Performance Computing Task Group (member, 2009-2010)
NCAR-Wyoming Supercomputing Center Sci. Advisory Panel (member, 2009-11; 2014)
Co-Chair, NSF Advisory Comm. on Computing for the Atmospheric Sciences (2007-2008)
OPeNDAP Advisory Board (2005 – 2009)

NSF Comm. for Petascale Computational Facilities for Geosci. (member, 2004 – 2005)
Chair, NSF Comm. on Cyberinfrastructure for R&D in Atmos. Sciences (2002 – 2004)
Member, Climate Simulation Laboratory Advisory Panel (1995-2014, chair 1999-2004)
Member, NCAR CISL HPC Advisory Panel (1990-2014)
Member, NASA Center for Computational Sciences Steering Committee (1989)
Member, NASA Center for Computational Sciences User's Committee (1986-1993)
Chair, College of Comp., Math. & Physical Sciences Supercomputing Comm. (1988-89)
Member, NASA Center for Comp. Sciences Scientific Requirements Comm. (1987,1994)
University of Maryland representative, NASA Center for Computational Sci. (1986-1993)
Contributor, University of Maryland Computer Science Center brochure (1988)
Member, University of Maryland Committee on High Performance Computing (1989-1991)

Reviewer:

European Commission Primavera project principal reviewer (2017-present)
Partnership for Advanced Computing in Europe (2013-present)
Natural Environment Research Council of the UK (2014)
National Centers for Environmental Prediction Review Panel (Co-Chair, 2008-2010)
NSF Office of Cyberinfrastructure Track I review panel (2007)
NSF Center for Multiscale Modeling of Atmos/ Processes Review Comm. (chair, 2007)
NOAA Climate Observations and Analysis Review (2007)
NSF Extensible Terascale Facility and Supercomputer Centers Review Panel (2006)
NOAA JISAO Cooperative Institute Review Committee (chair, 2005)
NOAA Applied Research Centers ECPC Review Committee (chair, 2005)
IRI search committees (1999-2000)
NSF Committee of Visitors (1998)
NASA MTPE Review Panel (1996)
Journals: Journal of Climate, Climate Dynamics, Monthly Weather Review, Geophysical Research Letters, Journal of Geophys. Research (Atmosphere, Oceans), Journal of Advances in Modeling Earth Systems, Journal of Climatology and Applied Meteorology, Journal of the Meteorological Society of Japan, IBM Journal of Research and Development, Natural Hazards, Atmospheric Research, Bulletin of the American Meteorological Society, Meteorological and Atmos. Research, Swedish Research Council, Advances in Atmospheric Science, Cambridge University Press, MacArthur Foundation
Agencies' grant programs: AID, DOE, NASA, NOAA, NSF, ONR

PUBLICATIONS:

Peer-reviewed journal articles (inverse chronological):

[*Web of Science* total publications = 115 (137 in Google Scholar), total citations = 6268 (8653 in Google Scholar), h-index = 42 (47 in GS)]

- Gaal, R. and J. L. Kinter 2021: Soil Moisture Influence on the Incidence of Summer Mesoscale Convective Systems in the U.S. Great Plains. *Mon. Wea. Rev.* (submitted).
- Manganello, J. and J. L. Kinter, 2021: Modulation of Mid-Atlantic Tropical Cyclone Landfalls by the MJO. *Geophys. Res. Lett.* (submitted).
- Shukla, R., B. Huang, C.-S. Shin, and J. L. Kinter III, 2021: Predictability of ENSO. *J. Climate* (submitted).
- Duan, Y., Kumar, S., & Kinter, J. L. (2021). Evaluation of long-term temperature trend and variability in CMIP6 multimodel ensemble. *Geophys. Res. Lett.*, 48, e2021GL093227. <https://doi.org/10.1029/2021GL093227>
- Singh, B. and J. L. Kinter, 2020: Tracking of Tropical Intraseasonal Convective Anomalies: Part 1: Seasonality of the Tropical Intraseasonal Oscillations. *J. Geophys. Res.*, 125, e2019JD030873
- Manganello J. V., B. A. Cash, E. T. Swenson, and J. L. Kinter III, 2019: Assessment of Climatology and Predictability of Mid-Atlantic Tropical Cyclone Landfalls in High-Atmospheric-Resolution Seasonal Prediction System. *Mon. Wea. Rev.*, 147, 2901-2917 doi: 10.1175/MWR-D-19-0107.1
- Bombardi, R., J. L. Kinter, O. W. Frauenfeld, 2019: A Global Gridded Dataset of the Characteristics of the Rainy and Dry Seasons. *Bull. Amer. Meteor. Soc.*, 100, 1315-1328.
- Shin, C.-S., B. Huang, J. Zhu, L. Marx, and J. L. Kinter III, 2019: Improved seasonal predictive skill and enhanced predictability of the Asian summer monsoon rainfall following ENSO events in NCEP CFSv2 hindcasts. *Climate Dyn.*, 52, 3079-2098, doi:10.1007/s00382-018-4316-y
- Bombardi, R., J. L. Kinter III, 2019: Convection Initiation in Climate Models Using the Heated Condensation Framework: A Review. In *Current Trends in the Representation of Physical Processes in Weather and Climate Models*, D. A. Randall, J. Srinivasan, R. A. Nanjundiah, and P. Mukhopadhyay, eds. (Springer Atmos. Sci.), 51-70.
- Shukla, R. P., J. L. Kinter III, 2019: Climatological Influence of Eurasian winter surface conditions on the Asian and Indo-Pacific summer circulation in the NCEP CFSv2 Seasonal Reforecasts. *Int. J. Climatology*, 39, 3431-3453, doi:10.1002/joc.6029.
- Bombardi, R., L. Trenary, K. Pegion, B. Cash, T. DelSole, and J. L. Kinter III, 2018: Seasonal predictability of summer rainfall over South America. *J. Climate*, 31, 8181-8195, doi:10.1175/JCLI-D-18-0191.1.
- Zhang, T., B. Huang, S. Yang and J. L. Kinter III, 2018: Predictable Patterns of the Atmospheric Low-Level Circulation over the Indo-Pacific Region in Project Minerva: Seasonal Dependence and Intra-Ensemble Variability. *J. Climate*, 31, 8531-8559.
- Shukla, R. P., B. Huang, L. Marx, J. L. Kinter III, C.-S. Shin, 2018: Predictability and Prediction of Indian summer monsoon by CFSv2: implication of the initial shock effect. *Climate Dyn.*, 50, 159-178.
- Singh, B., B. A. Cash and J. L. Kinter III, 2018: Indian Summer Monsoon Variability Forecasts in the North American Multimodel Ensemble (NMME). *Climate Dyn.*, doi: <https://doi.org/10.1007/s0038>.
- Mohan, S. T., H. Annamalai, L. Marx, B. Huang, J. L. Kinter III, 2018: Representation of ocean-atmosphere processes associated with extended monsoon episodes over South Asia in CFSv2. *Front. Earth Sci.*, doi:10.3389/feart.2018.00009.

- Shukla, R. P., J. L. Kinter III and C.-S. Shin 2018: Sub-seasonal Prediction of Significant Wave Heights over the Western Pacific and Indian Oceans, Part II: The impact of ENSO and MJO. *Ocean Modeling*, 123, 1-15.
- Halder, S., P. A. Dirmeyer, L. Marx and J. L. Kinter III, 2018: Impact of land surface initialization and land-atmosphere coupling on the prediction of the Indian summer monsoon with the CFSv2. *Frontiers Env. Sci.*, 5, 92. doi: 10.3389/fenvs2017.00092
- Huang, B., C.-S. Shin, J. Shukla, L. Marx, M. A. 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*, doi: 10.1175/JCLI-D-16-0642.1
- Manganello, J. V., K. I. Hodges, B. A. Cash, J. L. Kinter III, 2017: Seasonal Forecasts of North Atlantic Tropical Cyclone Activity in the North American Multi-Model Ensemble. *Climate Dyn.*, doi: 10.1007/s00382-017-3670-5.
- Bombardi R. J., K. V. Pegion, J. L. Kinter III, B. A. Cash and J. M. Adams, 2017: Sub-seasonal Predictability of the Onset and Demise of the Rainy Season over Monsoonal Regions. *Front. Earth Sci.* 5:14. doi: 10.3389/feart.2017.00014
- Feng, X., B. Huang; B. P. Kirtman; J. L. Kinter III; L. S. Chiu, 2017: A Multi-model Analysis of the Resolution Influence on Precipitation Climatology in the Gulf Stream Region. *Climate Dyn.*, 48, 1685-1704, doi:10.1007/s00382-016-3167-7.
- Zhou, T., A. G. Turner, J. L. Kinter III, B. Wang, Y. Qian, X. L. Chen, B. Wu, B. Wang, B. Liu, L. W. Zou, B. He, 2016: GMMIP (v1.0) contribution to CMIP6: Global Monsoons Model Inter-comparison Project. *Geosci. Model Dev.*, 9, doi: 10.5194/gmd-9-3589-2016.
- Kinter III, J. L., T. O'Brien, S. Penny, X. Yang, 2016: High-Resolution Coupling and Initialization to Improve Predictability and Predictions in Climate Models. *Bull. Amer. Meteor. Soc.* (submitted).
- Singh, B. and J. L. Kinter III, 2016: Tracking of Tropical Intraseasonal Convective Anomalies. In Proc. 6th Inter. Workshop Climate Informatics (CI 2016), Banerjee et al. eds., *NCAR Tech. Note*, TN-529, 61-64 (<http://dx.doi.org/10.5065/D6K072N6>).
- Shukla, R., and J. L. Kinter III, 2016: Sub-seasonal Prediction of Significant Wave Heights over the Western Pacific and Indian Oceans. *Wea. and Forecasting* (<http://dx.doi.org/10.1175/WAF-D-16-0078.1>).
- Bombardi, R. J., A. B. Tawfik. L. Marx; C.-S. Shin; 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. Mod. Earth Sys.*, doi: 10.1002/2016MS000668.
- Kumar, S., J. L. Kinter III, Z. Pan, and J. Sheffield, 2016: Twentieth century temperature trends in CMIP3, CMIP5 and CESM-LE: Spatial-temporal Uncertainties, Differences and Their Potential Sources. *J. Geophys. Res.*, 121, 9561-9575.
- Zhu, J., A. Kumar, B. Huang, M. Balmaseda, Z.-Z. Hu, L. Marx, and J. L. Kinter III, 2015: The Role of Off-Equatorial Surface Temperature Anomalies in the 2014 El Nino Prediction. *Nature Scientific Reports*, 6, doi:10.1038/srep19677.
- 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, doi: 10.1175/JCLI-D-15-0531.1.
- 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.
- 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.

- Cash, B., J. L. Kinter III, J. Adams, E. Altshuler, B. Huang, E. Jin, J. Manganello, L. Marx, T. Jung, 2015: Regional Structure of the Indian Monsoon in Observations, Reanalysis, and Simulation. *J. Climate*, 28, 1824-1841.
- Bombardi, R., 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.* 45, 2485-2498, doi: 10.1007/s00382-015-2484-6.
- 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.
- 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.
- Kumar, S., P. Dirmeyer, D. Lawrence, T. DelSole, E. L. Altshuler, B. A. Cash, M. J. Fennessy, Z. Guo, J. L. Kinter III, and D. M. Straus, 2014. Effects of Realistic Land Surface Initializations on Sub-seasonal to Seasonal Soil Moisture and Temperature predictability in North America and in Changing Climate simulated by CCSM4. *J. Geophys. Res.*, 119, 13,250-12,270, doi:10.1002/2014JD022110.
- 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 Atmos. GCM. *J. Climate*, 27, 7622-7646.
- Zhu, J., B. Huang, R.-H. Zhang, Z.-Z. Hu, A. Kumar, M. A. Balmaseda, L. Marx and J. L. Kinter III, 2014: Salinity anomaly as a trigger for ENSO events. *Nature Geosci.*, doi:10.1038/srep06821.
- Shukla, R. P. and J. L. Kinter III, 2014: Simulations of the Asian Monsoon Using a Regionally Coupled-Global Model. *Climate Dyn.* doi: 10.1007/s00382-014-2188-3
- Kumar, S., P. A. Dirmeyer and J. Kinter III, 2014: Usefulness of Ensemble Forecasts from NCEP Climate Forecast System in Sub-seasonal to Intra-annual Forecasting. *Geophys. Res. Lett.*, 41, 3586–3593, doi:10.1002/2014GL059586.
- 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.*, 43, 1141-1157.
- Guan, Y., J. Zhu, B. Huang, Z.-Z. Hu, J. L. Kinter III, 2014: Southern subtropical Pacific dipole: a predictable mode on multi-seasonal time scales. *J. Climate*, 27, 1648-1658.
- Krishnamurthy, V., C. Stan, D. A. Randall, R. P. Shukla, and J. L. Kinter III, 2014: Simulation of the South Asian monsoon in a coupled model with an embedded cloud resolving model. *J. Climate* doi: 10.1175/JCLI-D-13-00257.1.
- Palipane, E., J. Lu, G. Chen, J. L. Kinter III, 2013: Impacts of resolving sub-synoptic processes on annular mode timescales. *Geophys. Res. Lett.* 40, 4893–4899, doi:10.1002/grl.50649.
- 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 North American Multi-Model Ensemble: Phase-1 Seasonal to Interannual Prediction; Phase 2 Toward Developing Intraseasonal Prediction. *Bull. Amer. Meteor. Soc.*, 95, 585-601, doi: 10.1175/BAMS-D-12-00050.1.

- 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; rejected).
- Maloney, E. D., S. J. Camargo, E. Chang, B. Colle, R. Fu, K. L. Geils, Q. Hu, X. Jiang, N. Johnson, K. Karlsrukas, 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 21st Century Projections. *J. Climate*, 27, 2230–2270.
- Sheffield, J., S. J. Camargo, R. Fu, Q. Hu, X. Jiang, N. Johnson, K. Karlsrukas, 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 20th Century Intra-Seasonal to Decadal Variability. *J. Climate*, 26, 9247-9290.
- 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 20th Century Continental and Regional Climatology. *J. Climate*, 26, 9209-9245.
- Solomon, A., J. Lu, and J. L. Kinter III, 2013: Tornado Risks Will Shift with a Changing Climate. *Nature Comm.* (submitted; rejected).
- 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.
- 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.
- 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.
- Kumar S., V. Merwade D. Niyogi J. L. Kinter III, 2013: Evaluation of Temperature and Precipitation Trends and long-term Persistence in CMIP5 20th Century Climate Simulations. *J. Climate*, 26, 4168–4185. doi:10.1175/JCLI-D-12-00259.1.
- Kumar, S. J. L. Kinter III, P. A. Dirmeyer, Z. Pan, J. Adams, 2013: 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.
- 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 20th century as simulated by CMIP5 models. *J. Climate*, 26, 6215-6237. doi: 10.1175/JCLI-D-12-00559.1
- 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.

- 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.
- Kirtman, B. P., C. Bitz, F. Bryan, W. Collins, J. Dennis, N. Hearn, J. L. Kinter III, R. Loft, C. Rousset, L. Siqueira, C. Stan, R. Tomas and M. Vertenstein, 2012: Impact of Ocean Model Resolution on CCSM Climate Simulations. *J. Climate*, **39**, 303-328. doi:10.1007/s00382-012-1500-3
- 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.
- 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.
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- Kirtman, B., et al.: A US National Multi-Model Ensemble Prediction System, NOAA \$300,000 (2 years) (proposed 2011).

Doty, B. E., et al.: Enhancing GrADS: Leveraging High-Impact, Open-Source Dev. to Advance Geosci. Data Analysis, NSF \$496,411 (3 years) (proposed 2011).

Kinter III, J. L., et al.: Multi-Tier Intraseasonal-to-Decadal Climate Prediction: Resolving Regional Scales, NSF \$5,023,000 (5 years) (proposed 2010).

Kinter III, J. L.: A Multi-Institutional Post Doctoral Program for Climate/Earth System Modeling NSF and DOE, \$1,199,506 (4 years) (**awarded** 2009)

Kinter III, J. L.: EAGER: An International, Dedicated High-End Collaborative Project to Revolutionize Climate Modeling. NSF \$250K (2 years) (**awarded** 2009)

Kinter III, J. L. et al.: Predictability of the Physical Climate System. NSF, NOAA and NASA (\$18.5 million), (5 years) (**awarded** 2009)

Kinter III, J. L. et al.: New Coupling Strategies and Capabilities for Petascale Climate Modeling. NSF \$600K (three years) (**awarded** 2008)

Kinter III, J. L., et al.: Demonstrating the Value of NASA Research Satellite Data, Data Assimilation Products and Models for Improving Seasonal Prediction of Tropical Climate. NASA \$1,500K (3 years) (**awarded** 2005)

Kinter III, J. L. and B. P. Kirtman: COLA Contributions to NOAA ARCs Collaborative Research on Intra-Seasonal to Interannual Prediction. NOAA \$800K (3 years) (**awarded** 2004)

Saltz et al. (OSU): NMI Deployment (GEO) – On-Demand, Interactive Data Exploration Middleware: Integration and Deployment for Climate and Space Physics Studies. NSF \$698K (3 years) (proposed 2004)

Saltz et al. (OSU): SEI – Enabling Multi-Source Terascale Data Access, Fusion and Analysis for Geoscience Research. NSF \$360K (3 years) (proposed 2004)

Kinter III, J. L.: Desktop Weather-Forecast System. NOAA \$240K (two years) (**awarded** 2004)

Pascual, M. et al. (Univ. Michigan): Collaborative Research: The interplay of extrinsic and intrinsic factors in epidemiological dynamics: cholera as a case study. NSF and NOAA - \$400K (4 years) (**awarded** 2004)

Shukla, J. et al.: Predictability of Earth's Climate. NSF, NOAA and NASA - \$15M (5 years) (**awarded** 2004)

Pascual, M. et al. (Univ. Michigan, including J. L. Kinter III): Cholera and climate. NOAA \$150K (3 years) (**awarded** 2001)

Kafatos, M. et al.: GeoDESIC. NASA \$1.25M (5 years) (proposed - 2003)

Kinter III, J. L. et al.: COLA Contributions to NOAA ARCs Seasonal to Interannual Climate Predictability and Prediction Research. NOAA \$1.050M (3 years) (**awarded** 2002)

Kirtman, B. P. et al.: Interactive ensembles. NSF ITR \$4,994,000 (5 years) (proposed 2000)

Shukla, J. et al.: Predictability of the Current Climate. NSF, NOAA and NASA - \$12M (5 years) (**awarded** 1999)

Kafatos, M. et al. (GMU, including J. L. Kinter III and B. E. Doty): SIESIP. NASA \$1.2M (4 years) (**awarded** 1997)

Dirmeyer, P. A. and J. L. Kinter III: Integrated climate, hydrologic and decision-support models for regional assessment. NSF MMIA \$555,000 (3 years) (**awarded** 1997)

Shukla, J., J. L. Kinter III, E. K. Schneider, and D. M. Straus, Predictability and variability of the present climate. NSF, NASA, NOAA - \$11,736,380 (5 years) (**awarded** - 1994)

Kinter III, J. L. and B.E. Doty: The Grid Analysis and Display System (GRADS): An earth science analysis and visualization tool. NASA - \$441,743 (3 years) (proposed - 1993)

Kinter III, J. L. and J. Shukla: Variability and predictability of the coupled ocean-atmosphere-land climate system. DOE - \$200,000 (2 years) (**awarded** - 1992)

Schneider, E.K. and J.L. Kinter III: Variability of the climate system. NSF - \$295,000 (3 years) (**awarded** - 1991)

Shukla, J. and J. L. Kinter III: Collaborative research with Soviet Union on climate change in the Aral-Caspian region. NASA - \$50,000 (1 year) (**awarded** - 1991)

Kinter III, J. L.: The Grid Analysis and Display System (GrADS): A practical tool for earth science visualization. NASA - \$170,000 (2 years) (**awarded** - 1991)

Kinter III, J. L. and J. Shukla: TOGA atmospheric data archive: Preparations for reanalysis. NOAA -\$315,000 (2 years) (proposed - 1991)

Shukla, J. and J. L. Kinter III: Dynamic reassimilation of observations for global climate change studies: a feasibility experiment. NSF - \$1,620,000 (3 years) (**awarded** 1990)

Kinter III, J. L., et al.: The global hydrologic cycle - The role of atmosphere-ocean and atmosphere-biosphere interactions NASA - \$760,000 (3 years) (proposed-1988)

Shukla, J., J. L. Kinter III and P. J. Sellers: Interseasonal and interannual variations in the global water and energy cycles. NASA - \$600,000 (3 years) (proposed 1988)

Schneider, E. K., A. Navarra and J. L. Kinter III: The maintenance of stationary waves in a general circulation model. NSF - \$240,000 (3 years) (**awarded** 1988)

Shukla, J. and J. L. Kinter III: Integration of space and in situ observations to study atmosphere-ocean-land processes. NASA - \$550,000 (3 years) (**awarded** - 1987)

REFERENCES: Available upon request