JUDITH A. CURRY

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GENERAL INFORMATION

Education

1982	Ph.D.	The University of Chicago, Geophysical Sciences
1974	B.S. cum laude	Northern Illinois University, Geography

Professional Experience

2016-present	Professor Emerita, School of Earth and Atmospheric Sciences Georgia Institute of Technology
2006-present	President, Climate Forecast Applications Network, LLC
2002-2016	Professor, School of Earth and Atmospheric Sciences Georgia Institute of Technology
2002-2014	Chair, School of Earth and Atmospheric Sciences Georgia Institute of Technology
1992-2002	Professor, University of Colorado-Boulder Department of Aerospace Engineering Sciences Program in Atmospheric and Oceanic Sciences Environmental Studies Program
1989-1992	Associate Professor, Department of Meteorology, Penn State
1986-1989	Assistant Professor, Dept of Earth and Atmospheric Sciences, Purdue University
1982-1986	Assistant Scientist, Dept of Meteorology, University of Wisconsin-Madison

Awards/Honors

2017	Top 50 Women in STEM – Best Schools
2011	Graetzinger Moving School Forward Award, Georgia Tech
2007	Fellow, American Association for the Advancement of Science
2006	Best Faculty Paper Award, Georgia Tech Sigma Xi
2004	Fellow, American Geophysical Union
2002	NASA Group Achievement Award for CAMEX-4
2002	Green Faculty Award, University of Colorado
1997	Elected Councilor, American Meteorological Society
1995	Fellow, American Meteorological Society
1992	Henry G. Houghton Award, the American Meteorological Society
1988	Presidential Young Investigator Award, the National Science Foundation

Recent Professional Activities

World Meteorological Organization / International Council of Scientific Unions / International Ocean Commission / World Climate Research Programme

- Global Energy and Water Experiment (GEWEX) Radiation Panel (1994-2004)
- GEWEX Cloud System Studies (GCSS) Science Steering Group (1998-2004)
- Chair, GCSS Working Group on Polar Clouds (1998-2004)
- Chair, GEWEX Radiation Panel SEAFLUX Project (1999-2004)
- Steering Committee, IGAC/SOLAS Air-Ice Chemical Interactions (2003-2006)
- Science Steering Group, Arctic Climate System (ACSYS) Programme (1994-2000)

National Research Council – National Academies

- Space Studies Board (2004-2007)
- Climate Research Committee (2003-2006)
- Panel: A Strategy to Mitigate the Impact of Sensor Descopes and De-manifests on the NPOESS and GOES-R Spacecraft (2007-2008)
- Committee to review CCSP SAP 1.1 Temperature Trends in the Lower Atmosphere: Steps for Understanding and Reconciling Differences (2007)

U.S. Federal Agencies

- DOE Biological & Environmental Research Advisory Committee (BERAC) (2012-2015)
- Earth Science Subcommittee, NASA Advisory Council (2009-2013)
- Search Committee, NSF Director for Geoscience (2007)
- External Advisory Board, NCAR Atmospheric Technology Division (2004-2006)
- Science Board, DOE ARM Climate Reference Facility, (2008-2011)
- External Review Committee, COSIM Program, Los Alamos National Laboratory (2007)
- NOAA Climate Working Group (2004-2009)

Professional Societies

- Executive Committee, American Physical Society Topical Group on Physics of Climate (2013-2016)
- Member, Fellows Committee, American Geophysical Union (2013-2014)
- Executive Committee of the Council, American Meteorological Society (1998-2000)
- Councilor, American Meteorological Society (1997-2000)

Other

- Member, Visiting Committee, Dept of Earth and Atmospheric Sciences, Purdue Univ. (2008)
- Member, Visiting Committee, Dept of Earth, Atmosphere and Planetary Sciences, the MIT Corporation (2009 -)

RESEARCH

Books

Khvorostyanov, V.I. and J.A. Curry, 2014: *Kinetics and Thermodynamics of Clouds and Precipitation. Cambridge University Press*, Cambridge University, 762 pp

Curry, J.A. and P.J. Webster, 1999: *Thermodynamics of Atmospheres and Oceans.* Academic Press, London, 467 pp (second edition under contract).

Holton, J.P., J.A. Curry, and J. Doyle, eds., 2003: *Encyclopedia of Atmospheric Sciences.* Academic Press, London, 6244 pp.

Refereed Publications

1. Curry, J.A., 1983: On the formation of continental Polar air. *J. Atmos. Sci.,* 40, 2278-2292.
2. Herman, G.F. and J.A. Curry, 1984: Observational and theoretical studies of solar radiation in Arctic stratus clouds. *J. Clim. Appl. Met.,* 23, 5-24.
3. Curry, J.A. and G. F. Herman, 1985: Infrared radiative properties of Arctic stratus clouds. *J. Clim. Appl. Met.,* 24, 525-538.
4. Curry, J.A. and G.F. Herman, 1985: Relationships between large-scale heat and moisture budgets and the occurrence of Arctic stratus clouds. *Mon. Wea. Rev.,* 113, 1441-1457.
5. Curry, J.A., 1986: Interactions among turbulence, radiation and microphysics in Arctic stratus clouds. *J. Atmos. Sci.,* 43, 90-106.
6. Curry, J.A., 1986: Reply to comments on "Interactions between turbulence, radiation and microphysics in Arctic stratus clouds." *J. Atmos. Sci.,* 43, 2753-2755.
7. Curry, J.A., 1987: The contribution of radiative cooling to the formation of cold-core anticyclones. *J. Atmos. Sci.,* 44, 2575-2592.
8. Curry, J.A., E.E. Ebert, and G.F. Herman, 1988: Mean and turbulence structure of the summertime Arctic cloudy boundary layer. *Quart. J. Roy. Met. Soc.,* 114, 715-746.
9. Curry, J.A., 1988: Arctic cloudiness in spring from satellite imagery: some comments. J. Climatol., 8, 543-549.
10. Curry, J.A. and C.-H. Moeng, 1989: Role of cloud-top radiative cooling in the production of turbulence kinetic energy. *IRS'88: Current Problems in Atmospheric Radiation,* 60-63.
11. Curry, J.A., F.G. Meyer and E.E. Ebert, 1989: Cloudless ice-crystal precipitation in the polar regions. *IRS '88: Current Problems in Atmospheric Radiation,* 80-83.
12. Tian, L. and J.A. Curry, 1989: Cloud overlap statistics. *J. Geophys. Res.,* 94, 9925-9935.
13. Curry, J.A. and E.E. Ebert, 1990: Sensitivity of the thickness of Arctic sea ice to the optical properties of clouds. *Ann. Glaciol.,* 14, 43-46.
14. Curry, J.A., F.G. Meyer, L.F. Radke, C.A. Brock, and E.E. Ebert, 1990: The occurrence and characteristics of lower tropospheric ice crystals in the Arctic. *Int. J. Climatol.,* 10, 749-764.
15. Curry, J.A., C.D. Ardeel, and L. Tian, 1990: Liquid water content and precipitation characteristics of stratiform clouds as inferred from satellite microwave measurements. *J. Geophys. Res.,* 95, 16659-16671.
16. Meyer, F.G., J.A. Curry, C.A. Brock and L.F. Radke, 1991: Springtime visibility in the Arctic. *J. Appl. Meteor.,* 30, 342-357.

17. Ebert, E.E. and J.A. Curry, 1992: A parameterization of cirrus cloud optical properties for climate models. *J. Geophys. Res.,* 97, 3831-3836.
18. Sheu, R-.S. and J.A. Curry, 1992: Interactions between North Atlantic clouds and the large-scale environment. *Mon. Wea. Rev.,* 120, 261-278.
19. Curry, J.A. and G. Liu, 1992: Assessment of aircraft icing potential using satellite data. *J. Appl. Meteor.,* 31, 605-621.
20. Curry, J.A. and E.E. Ebert, 1992: Annual cycle of radiative fluxes over the Arctic Ocean: Sensitivity to cloud optical properties. *J. Climate,* 5, 1267-1280.
21. Liu, G. and J.A. Curry, 1992: Retrieval of precipitation from satellite microwave measurements using both emission and scattering. *J. Geophys. Res.,* 97, 9959-9974.
22. Ebert, E. and J.A. Curry, 1993: An intermediate one-dimensional thermodynamic sea ice model for investigating ice-atmosphere interactions. *J. Geophys. Res.,* 98, 10085-10109.
23. Tan, Y.C. and J.A. Curry, 1993: A diagnostic study of the evolution of an intense North American anticyclone during winter 1989. *Mon. Wea. Rev.,* 121, 961-975.
24. Liu, G. and J.A. Curry, 1993: Determination of characteristics of cloud liquid water from satellite microwave measurements. *J. Geophys. Res.,* 98, 5069-5092.
25. Wilson, L.D., J.A. Curry, and T.P. Ackerman, 1993: On the satellite retrieval of lower tropospheric ice crystal clouds in the polar regions. *J. Climate,* 6, 1467-1472.
26. Curry, J.A., J. Schramm and E.E. Ebert, 1993: Impact of clouds on the surface radiation budget of the Arctic Ocean. *Meteor. and Atmos. Phys,* 57, 197-217.
27. Curry, J.A. and L.F. Radke, 1993: Possible role of ice crystals in ozone destructionof the lower Arctic atmosphere. *Atmos. Environ.,* 27, 2873-2879.
28. Curry, J.A. et al., 1994: New Program to Research Issues of Global Climate in the Arctic. *EOS,* 75, 249-252.
29. Liu, G., J.A. Curry and M. Weadon, 1994: Atmospheric water balance in Typhoon Nina as determined from SSM/I satellite data. *Meteor. Atmos. Phys.* 54, 141-156.
30. Curry, J.A., J. Schramm and E. E. Ebert, 1995: On the sea ice albedo climate feedback mechanism. *J. Climate,* 8, 240-247.
31. Curry, J.A., 1995: Interactions Among Aerosols, Clouds and Climate of the Arctic Ocean. *The Science of the Total Environment*, 160/161, 777-791.
32. Liu, G., J.A. Curry, and C.A. Clayson, 1995: Study of tropical cyclogenesis using satellite data. *Meteor. Atmos. Phys.,* 56, 111-123.
33. Pinto, J.O., J.A. Curry and K.L. McInnes, 1995: Atmospheric convective plumes emanating from leads. Part I: Thermodynamic structure. *J. Geophys. Res.,* 100, 4621-4632.
34. Pinto, J.O. and J.A. Curry, 1995: Atmospheric convective plumes emanating from leads. Part II: Cloud microphysical and radiative properties. *J. Geophys. Res.,* 100, 4633- 642.
35. Alam, A. and J.A. Curry, 1995: Lead-induced atmospheric circulations. *J. Geophys. Res.,* 100, 4643-4652.
36. McInnes, K.L. and J.A. Curry, 1995: Modelling the mean and turbulent structure of the summertime Arctic cloudy boundary layer. *Bound. Lay. Meteor.,* 73, 125-143.
37. Liu, G., J.A. Curry, and R.S. Sheu, 1995: Classification of clouds over the western equatorial Pacific Ocean using combined infrared and microwave satellite data. *J. Geophys. Res.,* 100, 13,811-13,826.
38. Curry, J.A., J.L. Schramm, MC. Serreze, and E.E. Ebert, 1995: Water vapor feedback over

the Arctic Ocean. *J. Geophys. Res.,* 100, 14,223-14,229.
39. Ebert, E.E., J.L. Schramm, and J.A. Curry, 1995: Disposition of shortwave radiation in sea ice. *J. Geophys. Res.,* 100, 15965-15976.
40. Curry, J.A., D. Randall, and W.B. Rossow, and J.L. Schramm, 1996: Overview of arctic cloud and radiation characteristics. *J. Clim.,* 9, 1731-1764.
41. Webster, P.J., C.A. Clayson, and J.A. Curry, 1996: Clouds, radiation, and the diurnal cycle of sea surface temperature in the tropical western Pacific. *J. Clim.,* 9, 1712-1730.
42. Considine, G. and J.A. Curry, 1996: A statistical model of drop size spectra for stratocumulus clouds. *Quart. J. Roy. Meteor. Soc.,* 122, 611-634.
43. Sheu, R.-S., J. A. Curry, and G. Liu, 1996: Satellite retrieval of tropical rainfall using ISCCP analyses and microwave measurements. *J. Geophys. Res.,* 101, 21291-21301.
44. Liu, G.,J.A. Curry, 1996: Large-scale cloud features during winter in the north Atlantic Ocean determined from SSM/I and SSM/T2 observations. *J. Geophys. Res.,* 101, 7019-7032.
45. Clayson, C.A. and J.A. Curry, 1996: Determination of surface turbulent fluxes for TOGA COARE: Comparison of satellite retrievals and in situ measurements. *J. Geophys. Res.,* 101, 28,503-28,513.
46. Clayson, C.A., C.W. Fairall, and J.A. Curry, 1996: Evaluation of turbulent fluxes at the ocean surface using surface renewal theory. *J. Geophys. Res.*, 101, 28,515-28,528.
47. Sheu, R.-S., J.A. Curry, and G. Liu, 1997: Vertical Stratification of Tropical Cloud Properties as Determined from Satellite. *J. Geophys. Res.,* 102, 4231-4246.
48. Duane, G. and J.A. Curry, 1997: Entropy of a convecting water-air system and the interpretation of cloud morphogenesis. *Quart. J. Roy. Meteorol. Soc.,* 123, 605-629
49. Schramm, J.L., M. Holland, J.A. Curry, and E.E. Ebert, 1997: Modeling the thermodynamics of a distribution of sea ice thicknesses. Part I: Sensitivity to ice thickness resolution. *J. Geophys. Res.,* 102, 23079-23092.
50. Holland, M., J.A. Curry, J.L. Schramm, 1997: Modeling the thermodynamics of distribution of sea ice thicknesses. Part II: Ice/ocean interactions. *J. Geophys. Res.,* 102, 23093-23108.
51. Pinto, J.O., J.A. Curry, and C.W. Fairall, 1997: Radiative characteristics of the Arctic atmosphere during spring as inferred from ground-based measurements. *J. Geophys. Res.,* 102, 6941-6952.
52. Liu, G. and J.A. Curry, 1997: Precipitation characteristics in the GIN Seas determined using satellite microwave data. *J. Geophys. Res.,* 102, 13987-13998.
53. Curry, J.A., J.O. Pinto, T. Benner, and M. Tschudi, 1997: Evolution of the cloudy boundary layer during the autumnal freezing of the Beaufort Sea. *J. Geophys. Res.,* 102, 13851-13860.
54. Pinto, J.O. and J.A. Curry, 1997: Role of radiative transfer in the modeled mesoscale development of summertime arctic stratus. *J. Geophys. Res.,* 102, 13861-13872.
55. Alam, A. and J.A. Curry, 1997: Determination of surface turbulent fluxes over leads in arctic sea ice. *J. Geophys. Res.,* 102, 3331-3344.
56. Considine, G., J.A. Curry, and B.A. Wielicki, 1997: Modeling cloud fraction and horizontal variability in boundary layer clouds. *J. Geophys. Res.,* 102, 13
57. Schramm, J.L., M.M. Holland, and J.A. Curry, 1997: Applications of a single-column ice/ocean model understanding the mass balance of sea ice and snow in the Central Arctic.

Ann. Glaciol., 25, 287-291.
58. Holland, M.M., J.L. Schramm, and J.A. Curry, 1997: *Thermodynamic feedback processes in a single-column sea ice/ocean model. Ann*. Glaciol., 25, 327-332.
59. Arbetter, T., J.A. Curry, M.M. Holland, and J. M. Maslanik, 1997: Response of sea ice models to perturbations in surface heat flux. *Ann. Glaciol.,* 25, 193-197.
60. Tschudi, M., J.A. Curry, and J.M. Maslanik, 1997: Determination of areal surface feature coverage in the Beaufort Sea using aircraft video data. *Ann. Glaciol.,* 25, 434-438.
61. Considine, G. and J.A. Curry, 1998: Role of entrainment and droplet sedimentation on the microphysical structure in stratus and stratocumulus clouds. *Quart. J. Roy. Meteorol. Soc.,* 24, 123-150.
62. Randall, D., J. A. Curry, et al., 1998: Outlook for Large-Scale Modelling of Atmosphere Ice-Ocean Interactions in the Arctic. *Bull. Amer. Meteor. Soc.,* 70, 197-219.
63. Liu, G. and J.A. Curry, 1998: Remote sensing of ice water characteristics in tropical clouds using aircraft microwave measurements. *J. Appl. Meteor.,* 37, 337-355.
64. Liu, G. and J .A. Curry, 1998: An investigation of the relationship between emission and scattering signals in SSM/I data. *J . Atmos. Sci.,* 55, 1628-1643.
65. Alam, A. and J.A. Curry, 1998: Evolution of new ice and turbulent fluxes from freezing Arctic leads. *J. Geophys. Res.,* 103, 15,783-15,802.
66. Benner, T.C. and J.A. Curry, 1998: Characteristics of small tropical cumulus clouds and their impact on the environment. *J. Geophys. Res.,* 103, 28753-28768.
67. Webster, P.J. and J.A. Curry, 1998: The Oceans and Weather. *Scien. Amer.,* 9, 38-43.
68. Stamnes, K., Ellingson, R.G., J.A. Curry, J.E. Walsh, and B. D. Zak, 1999: Review of science issues and deployment strategies for the North Slope of Alaska/Adjacent Arctic Ocean (NSA/AAO) ARM site. *J. Climate,* 12, 46-63.
69. Pinto, J.O., J.A. Curry, and A.H. Lynch, 1999: Modeling clouds and radiation for the November 1997 period of SHEBA using a column climate model. *J. Geophys. Res.,* 104, 6661-6678.
70. Liu, G. and J.A. Curry, 1999: Tropical ice water amount and its relations to other atmospheric hydrological parameters as inferred from satellite data *J. Appl. Meteor.,* 38, 1182-1194.
71. Khvorostyanov, V.I., and J.A. Curry, 1999: A simple analytical model of aerosol properties with account for hygroscopic growth. Part I: Equilibrium size spectra and CCN activity spectra. *J. Geophys. Res.,* 104, 2163-2174.
72. Khvorostyanov, V.I., and J.A. Curry, 1999: A simple analytical model of aerosol properties with account for hygroscopic growth. Part II: Scattering and absorption coefficients. *J. Geophys. Res.,* 104, 2175-2184.
73. Perovich, D. K., E.L. Andreas, J.A. Curry, et al., 1999: Year on ice gives climate insights. *EOS,* 80, 481.
74. Khvorostyanov, V.I. and J.A. Curry, 1999: Theory of Stochastic Condensation in Clouds. Part I: A General Kinetic Equation. *J. Atmos. Sci,* 56, 3985-3996.
75. Khvorostyanov, V.I. and J.A. Curry, 1999: Theory of Stochastic Condensation in Clouds. Part II: Analytical Solutions of the Gamma-Distribution Type. *J. Atmos. Sci,* 56, 3997-4013.
76. Arbetter, T.E., J.A. Curry, and J.A. Maslanik, 1999: On the effects of rheology and ice thickness distribution in a dynamic-thermodynamic sea ice model. *J. Phys. Oceanog.,* 29,

2656-2670
77. Holland, M.M. and J.A. Curry, 1999: The role of different physical process in determining the interdecadal variability of Arctic sea ice. *J. Climate,* 12, 3319-3330.
78. Curry, J.A. et al., 1999: High-resolution satellite-derived dataset of the ocean surface fluxes of heat, freshwater and momentum for the TOGA COARE IOP. *Bull. Amer. Meteorol. Soc.,* 80, 2059-2080.
79. Kosovic, B., and J.A. Curry, 2000: A quasi steady state of a stable stratified atmospheric boundary layer: a large-eddy simulation study. *J. Atmos. Sci.,* 57, 1052-1068.
80. Jiang, H. W.R. Cotton, J.O. Pinto, J.A. Curry, and M.J. Weissbluth, 2000: Sensitivity of mixed-phase Arctic stratocumulus to ice forming nuclei and large-scale heat and moisture advection. *J. Atmos. Sci.,* 57, 2105-2117..
81. Liu, G. and J.A. Curry, 2000: Determination of ice water path and mass median particle size using multichannel microwave measurements. *J. Appl. Meteor.,* 39, 1318-1329.
82. Schramm, J.L., G. M. Flato, and J.A. Curry, 2000: Towards the modeling of enhanced basal melting in ridge keels. *J. Geophys. Res.,* 105, 14081-14092.
83. Khvorostyanov, V.I. and J.A. Curry, 2000: A New Theory of Heterogeneous Ice Nucleation for Application in Cloud and Climate Models. *Geophys. Res. Lett.,* 27 , 4081-408 4.
84. Curry, J.A., J.L. Schramm, D. Perovich, and J.O. Pinto, 2001: Application of SHEBA/FIRE data to evaluation of sea ice surface albedo parameterizations. *J. Geophys. Res.,* 106, 15345-15356.
85. Pinto, J.O., J.A. Curry, and J. Intrieri, 2001: Cloud-aerosol interactions during autumn over the Beaufort Sea. *J. Geophys. Res.,* 106, 15077-15098.
86. Haggerty, J.A., and J.A. Curry, 2001: Microwave emissivity of sea ice estimated from aircraft measurements during FIRE-SHEBA. *J. Geophys. Res.,* 106, 15265-15278.
87. Tschudi, M., J.A. Curry, and J.M. Maslanik, 2001: Airborne observations of summertime surface features and their effect on surface albedo during SHEBA. *J. Geophys. Res.,* 106, 15335-15344.
88. Benner, T., J.A. Curry, and J.O. Pinto, 2001: Radiative transfer in the summertime Arctic. *J. Geophys. Res.,* 106, 15173-15184.
89. Girard, E. and J.A. Curry, 2001: Simulation of arctic low-level clouds observed during the FIRE Arctic Clouds Experiment using a new bulk microphysics scheme. *J. Geophys. Res.,* 106, 15139-15154.
90. Khvorostyanov, V.I., J.A. Curry et al., 2001: Evaluation of an explicit microphysics scheme using observations of an upper-level cloud system observed during FIRE.ACE. *J. Geophys. Res.,* 106, 15099-15112.
91. Curry, J.A., 2001: Introduction to special section: FIRE Arctic Clouds Experiment. *J. Geophys. Res.,* 106, 14985-14989
92. Holland, G.H., P.J. Webster, J.A. Curry, et al., 2001: The Aerosonde robotic aircraft: A new paradigm for environmental observations. *Bull. Amer. Meteorol. Soc,* 82, 889-901.
93. Lin, B., P. Minnis, A. Fan, J.A. Curry, et al., 2001: Comparison of cloud liquid water paths derived from in situ and microwave radiometer data taken during the SHEBA/FIREACE. *Geophys. Res. Lett.,* 28, 975-978
94. Liu, G., J.A. Curry, J.A. Haggerty, and Y. Fu, 2001: Retrieval and Characterization of Cloud Liquid Water Path Using Airborne Passive Microwave Data during INDOEX. *J. Geophys.*

Res., 106, 28,719-28,730.
95. Tschudi, M., J.A. Curry, and J. Maslanik, 2002: Characterization of springtime leads in the Arctic Ocean from airborne observations during FIRE/SHEBA. *J. Geophys. Res.,* 107, art no. 8034
96. Uttal, T., Curry, J.A., and 26 others, 2002: Surface Heat Budget of the Arctic Ocean. *Bull. Amer. Meteor. Soc.,* 83, 255-275.
97. Curry, J.A. and A.H. Lynch, 2002: Comparing Arctic Regional Climate Models. *EOS,* Trans. Amer. Geophys. Union, 83, p 87.
98. Pinto, J.O., A. Alam., J.A. Maslanik, and J.A. Curry, 2003: Characteristics and atmospheric footprint of springtime leads at SHEBA. *J. Geophys. Res.,* 108, art no 8051..
99. Haggerty, J.A., J.A. Maslanik, and J.A. Curry, 2003: Heterogeneity of sea ice surface temperature at SHEBA from aircraft measurements. *J. Geophys. Res.,* 108, art no. 8052.
100. Curry, J.A., J.L. Schramm, A. Alam, R. Reeder, T.E. Arbetter, P. Guest, 2002: Evaluation of data sets used to force sea ice models in the Arctic Ocean. *J. Geophys Res.,* 107, art. no 3102.
101. Haggerty, J.A., J.A. Curry, and G. Liu, 2002: The potential for estimating cloud liquid water path over sea ice from airborne passive microwave measurements. *J. Geophys. Res.,* 107, art. No. 4007.
102. Randall., D., S. Krueger, C. Bretherton, J.A. Curry, et al., 2003: Confronting Models with Data: The GEWEX Cloud System Study. *Bull. Amer. Meteor. Soc.,* 84, 455-469
103. Khvorostyanov, V.I. and J.A. Curry, 2002: Terminal Velocities of Droplets and Crystals: Power Laws with Continuous Parameters Over the Size Spectrum. *J. Atmos. Sci.,* 59. 1872-1884.
104. Khvorostyanov, V.I., J.A. Curry, I. Gultepe, 2003: Simulations and observations of springtime cloud over the Cape Bathurst polynya. *J. Geophys. Res.,* 108 Art. No. 4296
105. Liu, G. and J.A. Curry, 2003: Observation and Interpretation of Microwave "Hot Spots" Over the Arctic Ocean During Winter. *J. Appl. Met.,* 42, 51-64.
106. Liu, G., H. Shao, J.A. Coakley, J.A. Curry, et al., 2003: Retrieval of Cloud Droplet Size from Visible and Microwave Radiometric Measurements during INDOEX: Implication to Aerosols Indirect Radiative Effect. *J. Geophys. Res.,* 108 (D1): art. no. 4006.
107. Morison, H., M. Shupe, J.A. Curry, 2003: Evaluation of a bulk microphysical scheme using SHEBA data. *J. Geophys. Res., 108*, art no. 4225.
108. Brunke, M.A., C.W. Fairall, X. Zeng, L. Eymard, J.A. Curry, 2003: Which bulk aerodynamic algorithms are least problematic in computing ocean surface turbulent fluxes? *J. Clim.,* 15, 619-635.
109. Liu, J.P., J.A. Curry, and D.G. Martinson, 2004: Interpretation of recent Antarctic sea ice variability. *Geophys. Res. Lett.,* 31, Art. No. L02205.
110. Khvorostyanov, V.I., J.A. Curry, 2004: Toward the theory of heterogeneous ice nucleation. Part I: Critical radius, energy and nucleation rate. *J. Atmos. Sci.,* 61, 2676-2691.
111. Curry, J.A., J.M. Maslanik, G.J. Holland, and J.O. Pinto, 2004: Applications of Aerosondes in the Arctic. *Bull. Amer. Meteorol. Soc.,* 85,1855-1861.
112. Agudelo, P.A. and J.A. Curry, 2004: Analysis of spatial distribution in tropospheric temperature trends. *Geophys. Res. Lett.,* 31, Art. No. L222207.
113. Inoue, J. and J.A. Curry, 2004: Application of Aerosondes to high-resolution observations of sea surface temperature over Barrow Canyon. *Geophys. Res. Lett.,* 31, Art. No. L14312.

114. Liu, J.P., J.A. Curry and Y.Y. Hu, 2004: Recent Arctic sea ice variability: connections to the Arctic Oscillation and the ENSO. *Geophys. Res. Lett.,* 31, L09211.
115. Curry, J.A. and 22 others, 2004: SEAFLUX. *Bull. Amer. Meteor. Soc.*, 85, 409-419.
116. Khvorostyanov, V.I. and J.A. Curry, 2004: On the Thermodynamic Theory of Freezing and Melting of Water and its Solutions: *J. Phys. Chem. A*, 108, 11073-11085.
117. Lynch, A.H., J. A. Curry, et al., 2004: Towards an integrated assessment of the impacts of extreme wind events on Barrow. Alaska. *Bull. Amer. Meteorol. Soc.,* 85, 209+
118. Khvorostyanov, V.I. and J.A. Curry, 2005: Toward the theory of heterogeneous ice nucleation. Part II: Parcel model simulations. *J. Atmos. Sci.,* 62, 261-284.
119. Mirocha, J.D., B. Kosovic, J.A. Curry, 2005: Vertical heat transfer in the lower atmosphere over the Arctic Ocean during clear sky periods. *Bound. Layer Meteorol.,* 117, 37-71.
120. Inoue, J., B. Kosovic and J.A. Curry, 2005: Evolution of a storm-driven boundary layer in the Arctic. *Bound. Layer Meteorol.,* 117, 213-230.
121. Morrison, H., J.A. Curry, V.I. Khvorostyanov, 2005: A new double-moment microphysics parameterization. Part 1: Description. *J. Atmos. Sci.,* 62, 1665-1677.
122. Morrison, H. J.A. Curry, et al., 2005: A new double-moment microphysics parameterization. Part 2: Application to Arctic stratiform clouds. *J. Atmos. Sci.,* 62, 1678-1693.
123. Liu, J., J.A. Curry, W. B. Rossow, J.R. Key, X. Wang, 2005: Comparison of surface radiative flux data sets over the Arctic Ocean. *J. Geophys. Res.,* 110, Art. No. C02015.
124. Khvorostyanov, V.I., J.A. Curry, 2005: Fall Velocities of Hydrometeors in the Atmosphere: Refinements to a Continuous Quasi - Power Law. *J. Atmos. Sci.,* 62, 4343-4357.
125. Morrison, H., M. Shupe, J.O. Pinto, J.A. Curry, 2005: Possible role roles of ice nucleation mode and ice nuclei depletion in the extended lifetime of arctic mixed phase clouds. *Geophys. Res. Lett.,* 32 (18): Art. No. L18801.
126. Webster, P.J., G.J. Holland, J.A. Curry, H.-R. Chang, 2005: Changes in tropical cyclone number, duration and intensity in a warming environment. *Science.* 309 (5742): 1844-1846
127. Inoue, J., J. Liu and J.A. Curry, 2005: Intercomparison of arctic regional climate models: Modeling clouds and radiation for SHEBA in May 1998. *J. Climate,* 19, 4167-4178.
128. Agudelo, P.A., J.A. Curry, C.D. Hoyos, P.J. Webster, 2006: Transition between suppressed and active phases of ISOs in the Indo-Pacific warm pool. *J. Climate,* 19, 5515-5530.
129. Rinke, A., K. Dethloff, J. Cassano, J.A. Curry, et al., 2006: Evaluation of an Ensemble of Arctic Regional Climate Models: Spatiotemporal Fields during the SHEBA Year. *Climate Dyn.,* 26, 459-472.
130. Khvorostyanov, V.I., H. Morrison, J.A Curry, P. Lawson, D. Baumgardner, 2006: High supersaturation and modes of ice nucleation in thin tropopause cirrus: Simulation of the 13 July 2002 CRYSTAL case. *J. Geophys. Res.,* 111., Art. No. D02201.
131. Curry, J.A., P.J. Webster, and G.J. Holland, 2006: Mixing Politics and Science in Testing the Hypothesis that Greenhouse Warming is Causing an Increase in Hurricane Intensity. *Bull. Amer. Meteorol. Soc.,* 87, 1025-1037.
132. Khvorostyanov, V.I. and J.A. Curry, 2006: Aerosol Size Spectra and CCN Activity Spectra: Reconciling the Lognormal and Power Laws. *J. Geophys. Res.,* 111, Art. D12202.
133. Hoyos, C.D., P.A. Agudelo, P.J. Webster, J.A. Curry, 2006: Deconvolution of the factors contributing to the increase in global hurricane activity. *Science* 312, (5770).
134. Webster, P.J., J.A. Curry, J. Liu, G.J. Holland, 2006: Response to comment on "Changes in tropical cyclone frequency and intensity in a warming environment". *Science,* 311 (5768).
135. Liu, J.P. and J.A. Curry, 2006: Variability of the tropical and subtropical ocean surface

latent heat flux during 1989-2000. *Geophys. Res. Lett,* 33, Art. No L05706.
136. Inoue J, Liu JP, Pinto JO, et al., 2006: Intercomparison of Arctic Regional Climate Models: Modeling clouds and radiation for SHEBA in May 1998 *J. Climate,* 19, 4167-4178
137. Agudelo PA, Curry JA, Hoyos CD, PJ Wbster, 2e006: Transition between suppressed and active phases of intraseasonal oscillations in the indo-pacific warm pool. *J. Clim.,* 19, 5519-5530
138. Khvorostyanov VI, Curry JA, 2007: Refinements to the Kohler's theory of aerosol equilibrium radii, size spectra, and droplet activation: Effects of humidity and insoluble fraction *J. Geophys. Res.,* 112 (D5): Art. No. D05206
139. Liu JP, Curry JA, Dai YJ, et al., 2007: Causes of the northern high-latitude land surface winter climate change. *Geophys. Res. Lett.,* 34 (14): Art. No. L14702
140. Wyser, K., Jones, CG, . . ., Curry JA et al., 2008: An evaluation of Arctic cloud and radiation processes during the SHEBA year: simulation results from eight Arctic regional climate models. *Climate Dynamics,* 30, 203-223.
141. Inoue, J., Curry JA, Maslanik JA, 2008: Application of Aerosondes to melt pond observations over Arctic sea ice. *J. Atmos. Ocean Tech.,* 25, 237-334.
142. Khvorostyanov, V. I.,J. A. Curry, 2008. Analytical solutions to the stochastic kinetic eqn for liquid and ice particle size spectra. Part I: small-size fraction. *J. Atmos. Sci.,* 65, 2025-2043
143. Khvorostyanov, V. I. and J. A. Curry, 2008. Analytical Solutions to the Stochastic Kinetic Equation for Liquid and Ice Particle Size Spectra. Part II: Large-Size Fraction in Precipitating Clouds. *J. Atmos. Sci.,* 65, 2044-2063.
144. Khvorostyanov, V. I. and J. A. Curry, 2008. Kinetics of cloud drop formation and its parameterization for cloud and climate models. *J. Atmos. Sci.,* 65, 2784-2802
145. Morrison, H., J.O. Pinto, J.A. Curry, G.M. McFarquhar, 2008: Sensitivity of M-PACE mixed-phase stratocumulus to cloud condensation and ice nuclei in a mesoscale model with two-moment bulk cloud microphysics. *J. Geophys. Res.,* 113, D05203
146. Agudelo, P.A., C. D. Hoyos, P. J. Webster, J. A. Curry, 2008: Prediction skill of intraseasonal variability of an operational model in a serial extended forecast experiment. *Climate Dynamics*, 32, 855-872.
147. Khvorostyanov, VI and JA Curry, 2009: Critical humidities of homogeneous and heterogeneous ice nucleation: inferences from extended classical nucleation theory. *J. Geophys. Res.,* 114, D04207.
148. Kim, HM, PJ Webster, JA Curry, 2009: Impact of shifting patterns of Pacific Ocean Warming on North Atlantic tropical cyclones. *Science,* 325, 77-80.
149. Khvorostyanov, VI, JA Curry, 2009: Parameterization of cloud drop activation based on analytical asymptotic solutions to the supersaturation equation. *J. Atmos. Sci.,* 66, 1905-1925.
150. Khvorostyanov, VI, JA Curry, 2009: Comment on "Comparisons with analytical solutions from Khvorostyanov and Curry (2007) on the critical droplet radii and supersaturations of CCN with insoluble fractions" by Kokkola et al. (2008). *Atmos. Chem. Phys.,* 9, 6033-6039.
151. Belanger, JI, JA Curry, CD Hoyos, 2009: Variabiity in tornado frequency associated with U.S. landfalling tropical cyclones. *Geophys. Res. Lett.,* 36, L17805.
152. Liu, J. and JA Curry, 2010: Accelerated warming of the Southern Ocean and its impacts on the hydrological cycle and sea ice. *PNAS,* 107, 14987-14992.
153. Sokolik, I.N., J. A. Curry, and V. Radionov, 2010: Interactions of Arctic aerosols with

land-cover and land-use changes in Northern Eurasia and their role in the Arctic climate system. In *Arctic land-cover and land-use in a changing climate: Focus on Eurasia,* G.Gutman and A. Reissell (Eds.), Springer.

154. Romanou A, Tselioudis G, Zerefos CS, Curry JA et al. 2010: Evaporation-precipitation variability over the Mediterranean and the Black Seas from satellite and reanalysis estimates. *J. Climate,* 23, 5268-5287.
155. Webster PJ, Jian J, Hopson TM, Hoyos CD, Agudelo PA, Chang HR, Curry JA, Grossman RL, Palmer TN, Subbiah AR, 2010: Extended-range probabilistic forecasts of Ganges and Brahmaputra floods in Bangladesh. *Bull. Amer. Meteorol. Soc.,* 91, 1493-U121.
156. Belanger JI, Curry JA, Webster PJ, 2010: Predictability of North Atlantic Tropical Cyclone Activity on Intraseasonal Time Scales. *Mon. Weather Rev.,* 138, 4362-4374.
157. Liu JP, Curry JA, Zhang ZH, et al. 2011: Evaluation of satellite sea surface temperatures in the southern hemisphere using Chinese Antarctic research cruise observations. *Int. J. Rem. Sens.,* 32, 171-184.
158. Agudelo PA, Hoyos CD, Curry JA, Webster, PJ, 2011: Probabilistic discrimination between large-scale environments of intensifying and decaying African Easterly Waves. *Clim. Dyn,* 36, 1379-1401.
159. Kim HM, Webster PJ, Curry JA, 2011: Modulation of North Pacific Tropical Cyclone Activity by Three Phases of ENSO. *J. Climate,* 24, 1839-1849.
160. Liu, J., Curry JA, Clayson CA, Bourassa, MA 2011: High resolution satellite surface latent heat fluxes in North Atlantic hurricanes. *Mon Weather Rev.,* 139, 2735-2747.
161. Curry, JA 2011: Reasoning about climate uncertainty. *Climatic Change,* 108, 723-732 (invited).
162. Curry, JA and Webster PJ 2011: Climate science and the uncertainty monster. *Bull Amer Meteorol. Soc.,* 92, 1667-1682.
163. Curry, JA 2011: Nullifying the climate null hypothesis. *WIRES Climate Change*, 2, DOI: 10.1002/wcc.141
164. Zhang, H., I. N. Sokolik, and J. A. Curry, 2011: Impact of Saharan dust as nucleating aerosols on Hurricane Helene's early development, *Atmos. Chem. Phys. Disc.,* acp-2011-246, 2011.
164. Liu, J. J.A. Curry et al. 2012: Impact of declining sea ice on Arctic snowfall. *PNAS,* 109, 4074-4079.
166. Choi, S., Wang, Y., Salawitch, R. J., Canty, T., Joiner, J., Zeng, T., Kurosu, T. P., Chance, K., Richter, A., Huey, L. G., Liao, J., Neuman, J. A., Nowak, J. B., Dibb, J. E., Weinheimer, A. J., Diskin, G., Ryerson, T. B., da Silva, A., Curry, J., Kinnison, D., Tilmes, S., and Levelt, P. F. 2012: Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC, *Atmos. Chem. Phys.,* 12, 1255-1285.
167. Curry, JA and VI Khvorostyanov, 2012: Assessments of parameterizations of ice heterogeneous nucleation in cloud and climate models. *Atmos. Phys. Chem.,*10, 2669–2710
168. Belanger, J. I., P. J. Webster, J. A. Curry, and M. T. Jelinek, 2012: Extended Prediction of North Indian Ocean Tropical Cyclones, *Weather & Forecasting*, 27, 757-769.
169. Kim, H. M., P. J. Webster and J. A. Curry, 2012: Seasonal prediction skill of ECMWF System 4 and NCEP CFSv2 retrospective forecast for the Northern Hemisphere Winter,

Climate Dynamics, DOI: 10.1007/s00382-012-1364-6.

170. Kim, HM, PJ Webster, JA Curry 2012: Evaluation of short-term climate change predictions in multi-model CMIP5 decadal hindcasts. *Geophys. Res. Lett.,* 39, L10701.
171. Liu, J and JA Curry, 2012: Reply to Li and Wu: Arctic sea ice and winter snowfall. PNAS, 109, E1899-E1900.
172. Young, AH, JJ Bates, JA Curry, 2012: Complementary use of passive and active remote sensing for detecting penetrating convection from CloudSat, CALIPSO, and Aqua MODIS. *J. Geophys Res. – Atmos.,* 117, D13205.
173. Khvorostyanov, VI and JA Curry, 2012: Parameterization of homogeneous ice nucleation for cloud and climate models based on classical nucleation theory. *Atmos. Chem. Phys.,* in press.
174. Hellmuth, O., JA Curry, et al. 2013: Review on the phenomenology of and mechanism of atmospheric ice formation: selected questions of interest. In JWP Schmelzer, G Ropke, VB Priezzhev, eds.: *Nucleation Theory and Its Applications*, JINR Dubna, p 424-543.
175. Liu, J., JA Curry, HJ Wang, JM Horton, MR Song, 2012: Reply to Li and Wu: Arctic sea ice and winter snowfall. PNAS, 109, E1899-E1900.
176. Muller, R., J.A. Curry, et al. 2013: Decadal variations in the global land temperature. *J. Geophys. Res.*, 118, 5280–5286.
177. Wickham, C., R. Rohde, R. Muller, J. Wurtele, J.A. Curry, D. Groom, Ro. Jacobsen, S. Perlmutter, A. Rosenfeld 2013: Influence of urban heating on the global temperature land average using rural sites identified from MODIS classifications. *Geoinformatics & Geostatistics*, doi:10.4172/gigs.1000104.
178. Rohde, R., R. Muller, R. Jacobsen, S. Perlmutter, A. Rosenfeld, J. Wurtele, D. Groom, J.A. Curry, C. Wickham, 2013: Berkeley Earth Temperature Averaging Process. *Geoinformatics and Geostatistics,* doi:10.4172/gigs.1000103.
179. Muller, R., J. Wurtele, R. Rohde, R. Jacobsen, S. Perlmutter, A. Rosenfeld, JA Curry, D. Groom, C. Wickham, 2013: Earth atmosphere land surface temperature and station quality in the United States. *Geoinformatics and Geostatistics,* doi:10.4172/2327-4581.1000107.
180. Curry JA, 2013: Climate change: No consensus on consensus. *CAB Reviews*, 8, 001.
181. Holley, AH, JJ Bates and JA Curry, 2013: Application of cloud vertical structure from CloudSat to investigate MODIS-derived properties of cirriform, anvil, and deep convective clouds. *J. Geophys. Res.,* DOI: 10.1002/jgrd.50306.
182. Wyatt, MG and JA Curry, 2013: Dynamics of the propagation of a secularly varying hemispheric climate signal during the 20th century. *Climate Dynamics*, DOI 10.1007/s00382l-013-1950-2.
183. Liu, J., JA Curry, H. Wang, R. Horton, MR Song, 2014: Reply to Li and Wu: Arctic sea ice and winter snowfall. *PNAS*, 111, E530.
184. Curry JA, 2014: Climate science: Uncertain temperature trends. *Nature Geoscience,* 7, 83-84.
185. Kravtsov, S., MG Wyatt, JA Curry, A Tsonis, 2014: Two contrasting views of multidecadal climate variability in the 20th century. *Geophys. Res. Lett.,* 41, 6881-6888.
186. Lewis, N. and JA Curry, 2015: The implications for climate sensitivity of AR5 forcing and heat uptake estimates. *Climate Dynamics,* DOI 10.1007/s00382-2342-y.

187. Kravtsov, S., M.G. Wyatt, J.A. Curry, A.A. Tsonis, 2015: Comment on 'Atlantic and Pacific multidecadal oscillations and Northern Hemisphere Temperatures. *Science*, 350 DOI: 10.1126/science.aab3570
188. Belanger, J.I., J.A. Curry, M.T. Jelinek, 2016: A climatology of easterly waves in the tropical Western Hemisphere. *Geoscience Data Journal*
189. Lewis, N. and JA Curry, 2018: The impact of recent forcing and ocean heat uptake data on estimates of climate sensitivity**.** *Journal of Climate***,** [https://doi.org/10.1175/JCLI-D-17-0667.1]

CONGRESSIONAL TESTIMONY

- Testimony, House Committee on Science, Space and Technology, "Using Technology to Address Climate Change," 5/16/18 https://curryja.files.wordpress.com/2018/05/curry-house-science-testimony.pdf
- Testimony, House Committee on Science Space and Technology, "Climate Science: Assumptions, Policy Implications and the Scientific Method," 3/29/17 https://curryja.files.wordpress.com/2017/03/curry-house-science-testimony-mar- 17.pdf
- Testimony, Senate Subcommittee on Space, Science and Competitiveness, "Data or Dogma? Promoting Open Inquiry in the Debate Over the Magnitude of Human Impact on Climate Change,"12/8/15 https://curryja.files.wordpress.com/2015/12/curry-senate- testimony-2015.pdf
- Testimony, House Committee on Science, Space and Technology, "The President's U.N. Climate Pledge," 4/15/15, https://curryja.files.wordpress.com/2015/04/house- science-testimony-apr-15-final.pdf
- Testimony, Senate Environment and Public Works, "President's Climate Action Plan," 1/16/14 http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=07472bb4-3eeb-42da-a49d-964165860275
- Testimony, House Subcommittee on Energy & Environment, "Policy Relevant Climate Issues in Context", 4/26/13 http://curryja.files.wordpress.com/2013/04/curry-testimony-2013-il.pdf
- Testimony, House Subcommittee on Energy & Environment, "Rational Discussion of Climate Change: the Science, the Evidence, the Response," 11/17/10 http://curryja.files.wordpress.com/2013/02/curry-epw-testimony.pdf
- Testimony, House Select Committee on Energy Independence and Global Warming, "Dangerous Climate Change," 4/26/07 http://curryja.files.wordpress.com/2013/02/energy-curry-testimony.pdf
- Testimony, House Reform Committee, "Hurricanes and Global Warming," 7/20/06 http://curry.eas.gatech.edu/climate/pdf/testimony-curry.pdf