CURRICULUM VITAE
(Updated 24 January 2023)
Margaret Anne LeMone

PERSONAL

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EDUCATION

1972 Ph.D. Atmospheric Sciences University of Washington
1967 A.B. Mathematics University of Missouri

PROFESSIONAL RECORD

2017-2021	NCAR Distinguished Scholar
Dec. 2009-present	Senior Scientist Emerita, National Center for Atmospheric Research (NCAR)
2003-2009	Chief Scientist, GLOBE
1992-2009	Senior Scientist, NCAR
2002-2005	Member, Steering Committee for Water Cycle Initiative
1999-2000	Coordinator, Cloud and Surface Processes Parameterizations Mesoscale and Microscale Meteorology Division, NCAR
1998-1999	Sabbatical, ASP and NOAA Aeronomy Lab
1994-1998	Group Leader, Mesoscale Analysis Group, Senior Scientist, NCAR
1982-1992	Scientist III, National Center for Atmospheric Research
1986-1987	Group Leader, Mesoscale Interactions Section, Mesoscale and Microscale Meteorology Division, National Center for Atmospheric Research
1984-1986	Section Head, Mesoscale Interactions Section, Cloud Systems Division, National Center for Atmospheric Research
1980-1982	Staff Scientist II, GATE Group, Cloud Systems Division, National Center for Atmospheric Research
1978-1980	Staff Scientist II, Mesoscale Research Section, National Center for Atmospheric Research
1973-1978	Ph.D. Scientist, GATE Group, National Center for Atmospheric Research
1974-1975	Acting Project Leader, GATE Group, National Center for Atmospheric Research
1972-1973	Post-Doctoral Fellow, Advanced Study Program, National Center for Atmospheric Research

HONORS AND AWARDS

2017	Honorary Member, AMS
2013	Joanne Simpson Mentorship Award, AMS
2011	Outstanding Alumnus, Columbia, Missouri Public Schools

2004	AMS Charles Anderson Award (Education and Outreach)
1997	Inducted into National Academy of Engineering
1995	NCAR Education Award
1995	Elected Fellow of the AAAS
1989	Editor's Award, *Journal of the Atmospheric Sciences*, AMS
1983	Elected Fellow of the AMS
1976	Honorable Mention for the NCAR Outstanding Publication Award
1967	Woodrow Wilson Fellow, NSF Fellow, and NDEA Fellow
1966	Elected to Phi Beta Kappa

PROFESSIONAL ACTIVITIES – SCIENCE

National Organizations

1969-present	Member, American Geophysical Union (AGU)
1969-present	Fellow, American Association for the Advancement of Science (AAAS)[1]
1969-present	Fellow, American Meteorological Society (AMS)

American Meteorological Society

2013-2016	Member, Nominating Committee (Chair 2016)
2013	Chair, Awards Oversight Committee
2012	Second Past President
2011	Past President
2010	President
2009	President-Elect
2007-2009	Member, Fellows Committee
2003	Guest Editor (with Greg Poulos) of *Journal of the Atmospheric Sciences* special edition on CASES 1999
2000-2005	Member, Planning Commission
2003-2004	Member, Ad Hoc Ethics Committee
1998	Organizing Committee, Observance 25th Anniversary of GATE
1998	Chair, Awards Committee
1997	Member, Awards Committee
1993-1996	Member, Executive Committee
1993-1996	Councillor
1990-1991	Guest Editor, *Monthly Weather Review*, TAMEX special edition
1991-1995	Editor, *Journal of the Atmospheric Sciences*
1988-1991	Associate Editor, *Journal of the Atmospheric Sciences*
1990	Local arrangements committee for 4th Conference on Mesoscale

[1] My membership in AAAS is ambiguous. Several years ago, I became a "spousal" member, so that we would get only one issue of *Science* a week at our house. When I was receiving lots of ads to join AAAS a few years ago, and they told me that (a) I wasn't a member, and (b) they had never had "spouse" memberships. I supposed they eliminated this at some point (after 2012, since I was an officer then). I told him I didn't want to rejoin, but that I would send them money every year as a donation.

Processes (Boulder)

1990	Member and Chair, Nominating Committee
1989	Member, Nominating Committee
1987	Co-convenor of 3rd Conference on Mesoscale Processes (Vancouver)
1987-1990	Member, Mesoscale Committee
1983-1985	Member, Committee on Tropical Meteorology and Tropical Cyclones
1977-1980	Councillor
1975-1978	Founding Chair, AMS Board on Women and Minorities
1974-1975	Chair, Ad Hoc Committee of Women in Meteorology

American Association for the Advancement of Science

2009-2012	Member, nominating committee for Section W
1989-1992	Member-at-large, Section W
1984-1987	Council Delegate, Section W
1979-1981	Member, nominating committee for Section W (Atmospheric and Hydrospheric Sciences, Chair 1981)

National Academy of Engineering

1997-present	Member
2012-2014	Member, Membership Policy Committee
2010-	Member, Nominating Committee
2001-2004	Member, Program Development Committee Review and Advisory Panels
2003	Chair, Section 12
2002	Vice Chair, Section 12
2001	2nd Vice Chair, Section 12
1998-2001	Member, Peer Review Committee, Section 12

National Research Council Committees/Boards

2014	Reviewer, Report conference on impact of Arctic ice reduction on weather (rough title).
2012?	Reviewer Coordinator, report on NOAA (rough title)
2006-2008	Member, NRC Committee on Developing Mesoscale Observational Capabilities to Meet Multiple National Needs
2004-2006	Member, NRC Committee on Strategic Guidance for NSF's Support for Research in the Atmospheric Sciences
2002-2004	Member, NRC Committee on Road Weather
2001-2002	Member, NRC Committee on Tools for Tracking Chemical/Biological/Nuclear Releases in the Atmosphere: Implications for Homeland Security
2001-2004	Member, National Research Council Board on Atmospheric Sciences and Climate
1999-2000	Member, NRC Panel on Improving the Effectiveness of U.S. Climate Modeling
1992-1997	Member, National Research Council Board on Atmospheric Sciences and

Climate

Other Advisory Panels, etc.

2010	Member, NOAA Physical Science Laboratory Review Panel
2006	Member, Academic Review Committee for Atmospheric Science Department, University of Arizona
2006-2008	Member NSF-Sponsored Facilities Assessment Committee (co-Chair, "Surface in-situ Sensing" sub-committee)
2001-2002	Member, Review Panel for DOE's VTMX (Vertical Transport and Mixing) Experiment
2000-2003	Member, NSF Observational Facility Advisory Panel
1997-1999	Member, USWRP Scientific Steering Committee
1998-2000	Member, Review Panel for Argonne Environmental Research Division
1998	Member, Argonne Boundary Layer Experiments Advisory Committee
1990-1993	Member, CSMP (Climate System Modeling Program) Science Advisory Council
1989	Reviewer, NOAA Severe Storms Initiative
1985-1989	Member, NCAR/RAF Advisory Panel
1984	Committee member, review of the Atmospheric Sciences Department at UCLA
1977	Member, California/NOAA Review Panel No. VII, Air Resources Laboratory (ARL) and Center for Experiment Design and Data Analysis (CEDDA)

Field Programs

2000-2002	Participant International H_2O Project (IHOP) surface flux station siting and design team; King Air boundary-layer flight design and implementation team, PI
1998-1999	Advisor to organizers of the CASES 99
1997	Co-PI (with Bob Grossman) of CASES-97
1991-1993	TOGA-COARE: Principal Investigator, assist in planning aircraft missions; participate in Field Program in Honiara (Jan-Feb 1993)
1990-1992	STORM-FEST: Member, Scientific Steering Committee Coordinator, Boundary Layer Program Member, Scientific Mission Planning Team STORM I: & Winter/Spring Systems Integration Committee
1984-1992	STORM-Central: Member, Boundary-Layer planning group (Chair, 1987-1992)
1987	TAMEX: Aircraft Coordinator and participant
1985	PRE-STORM: Member, Scientific Steering Committee and participant (part of ground-based Mission Scientist pool for aircraft flights)
1973-1974	GATE: Helped plan the GATE boundary layer sub-program, GATE aircraft patterns, Airborne Mission Scientist (on-site coordinator for the GATE aircraft), Mission Scientist (coordinating mission from Dakar), Airborne Scientist. On occasion, still assist scientists in finding and accessing GATE data.

Cooperative Atmosphere-Surface Exchange Study (CASES). The CASES objective was to find one spot, which corresponded to a watershed, at which continuous measurements over years were supplemented by intensive field campaigns as well as modeling efforts to understand surface exchanges form a holistic point of view that linked atmospheric science, hydrology, ecology, and chemistry.

1995-2005	Organizer and promoter of the Cooperative Atmosphere Surface Exchange study (CASES), with Bob Grossman and Bill Blumen).

This involved engaging a number of leaders in the fields of boundary-layer meteorology, hydrology, atmosphere-surface exchange, and atmospheric chemistry; setting up an advisory committee, contacting federal agencies about funding, and organizing a series of national meetings, which culminated in a symposium in Wichita, Kansas in 1995, at which time the site was officially chosen and plans firmed up. John Pflaum did much of the legwork for us. CASES became a reality in the form of the Argonne Boundary Layer Experiments Facility, run by Marv Wesely's group at the Argonne National Laboratory, operating from March, 1997 through September, 2004 (data are still available online). In addition to CASES-97 and CASES-99, IHOP_2002 observations were taken in the same region, allowing a look at how surface-atmosphere interactions evolved with seasons as well as year to year. DOE had a hydrological pilot project there as well.

Women/Minority Activities not covered above

2008-present	Coordinating committee to survey staff to assess situation for UCAR female scientists, as well as response to CSWP survey
1999-2000	Coordinating Committee to facilitate American Physical Society Committee on the Status of Women Physicists site visit to UCAR
2000-2004	Science Mentor, SOARS (Significant Opportunities in Scientific Research and Science)
1997	Speaker on Women in Science at Texas A&M Graduate School Event (March)
1995-2004	Member, SOARS Advisory Committee
1991-1992	AMS Ad Hoc Committee to design survey on women, minorities, and handicapped
1972-1974	Surveys of Women in Atmospheric Sciences, with J. Simpson1980-1982 & (1972-74), with P. Waukau (1980-82)
1977	One of 60 Women Participants in AAAS meeting on Participation of Women in Scientific Research
1975-1976	Supervised minority students as part of NCAR work-study program
1975-present	Periodically talks on women in atmospheric science at different locations (including Univ. of Oklahoma, Purdue, Texas A&M, Univ. of Colorado, AMS Annual meeting, etc.)

Service to NCAR

2005	Member, committee to select proposals from Directors' Opportunity Fund Competition

2010-2015	Helping Steve Williams and others in EOL in rescuing material for the archives (documentation of old field programs, etc.), with particular focus on GATE and CASES-97. I continue to make sure that CASES-97 on-line material is up to date.(started with boxes from the warehouse).
2003-2005	Co-Chair, NCAR Scientists' Assembly
2000-present	Member, NCAR Scientists' Assembly Steering Committee
2003	Co-Chair, Committee to select proposals from Directors' Opportunity Fund Competition
2002-2005	Member, Water Cycle Initiative Steering Committee
2003-2004	Member, steering committee to select head of GLOBE
2004	Member, steering committee to select heat of MMM
1995	Member, UCAR Office of Projects Director search committee
1995	Co-organizer, CASES Symposium, Wichita, Kan. 22-24 February; Gave presentation on the meteorological uses of CASES.
1991	Member, Research Aviation Facility Director search committee

PROFESSIONAL ACTIVITIES – EDUCATION AND OUTREACH

Representation of Science in Film

2005	Juror, Sundance Film Festival, for the Sloan Prize for best film depicting science or scientists in a feature film.
2016	Helped provide ideas for a segment of *The Nature of Things*, a program on Canadian public television; was filmed for cricket-chirp-temperature measurement part.

University Interaction

1994-present	Adjoint Professor, University of Colorado
1996-?	Affiliate Professor, Colorado State University (ended)
1984-1990	Affiliate Professor, Colorado State University

Graduate Committees (Atmospheric Science)

- Co-Advisor for Ph. D. student (Joseph Alfieri) at Purdue University (2007-2009)
- Member, Ph.D. Committee for Jennifer Davison, University of Illinois (2007-2013)
- 5 Ph.D. committees (University of Wyoming, Colorado, Chicago, and Colorado State)
- External Reviewer for two Ph. D. theses (Monash University, University of British Columbia)
- 2 M. S. Committees (Texas Tech University, Colorado State University)

Undergraduate Education

- Supervised one atmospheric-science undergraduate thesis at the University of Colorado
- Instructor of record for Workshop in Instruction and Curriculum in the content area of atmospheric sciences, Course 5575, Education Dept., University of Colorado as part of UCAR/University of Colorado's Project LEARN (1997-2000).

K-12 Education and Outreach

2015, 2016	For one week each summer, was a teacher in a week-long Reading Camp for Whittier Elementary students behind in reading, the first year as an assistant teacher working on weather topics, and as a full teacher the second year working on dinosaur topics.
2003-2009	Chief Scientist, GLOBE
2002,2004	Lecturer at UCAR summer program for high school teachers
1996-2000	Co-PI, Project LEARN (help organize 3 week summer workshop 1988, school workshops, speaker for both)
1994-1997	Member, CONNECT Committee, a school-community collaborative effort to find ways to meet education standards.
1992-2000	Speaker for AMS Project ATMOSPHERE (once per year)
1992-1996	Speaker for UCAR's Project LEARN (once per year)
1988-present	Volunteer speaker in Boulder-Denver area schools on weather, dinosaurs, and related topics.
1989	Teacher of weather class as part of Whittier School's Talented and Gifted Program
1988	Odyssey of the Mind Coach, Whittier Elementary School

Consulting

Technical Content Reviewer

2007-2009	Jack Williams' *The Ultimate Guide to American Weather*
1990-present	Revised or wrote articles for *World Book Encyclopedia*
1989	*Storm*, Time-Life
1983-1993	Revise *Earth Science*, (high school science text) for D.C. Heath (weather portions)
1978-1979	*Elementary School Science Series*, Holt, Rinehart and Winston, (weather portion of texts)
1974	*Weather in the West*, American West Publishing Company

PUBLICATIONS-Refereed

1. Buettner, K. J. K., and M. A. **LeMone**, 1970: Lunar glass: origin and effects. *Naturwissenschaften*, **57**, 87-88. (Also published in German in *Glastechnische Berichte*, **43**, 211-212).

2. **LeMone**, M. A., 1973: The structure and dynamics of horizontal roll vortices in the planetary boundary layer. *J. Atmos. Sci.*, **30**, 1077-1091.

3. Pennell, W. T., and M. A. **LeMone**, 1974: An experimental study of turbulence structure in the fair--weather trade wind boundary layer. *J. Atmos. Sci*., **31**, 1308-1323.

4. **LeMone**, M. A., 1976: Modulation of turbulence energy by longitudinal rolls in an unstable planetary boundary layer. *J. Atmos. Sci*, **33**, 1308-1320.

5. **LeMone**, M. A. and W. T. Pennell, 1976: The relationship of trade-wind cumulus distribution to subcloud-layer fluxes and structure. *Mon. Wea. Rev*., **104**, 524-539.

6. Sommeria, G., and M. A. **LeMone**, 1978: Direct testing of a three-dimensional model of the planetary boundary layer against experimental data. *J. Atmos. Sci*., **35**, 25-39.

7. Wyngaard, J. C., W. T. Pennell, D. H. Lenschow, and M. A. **LeMone**, 1978: The temperature-humidity covariance budget in the convective boundary layer. *J. Atmos. Sci*., **35**, 47-58.

8. Pennell, W. T., D. H. Lenschow, and M. A. **LeMone**, 1979: Some aspects of turbulence in the atmospheric boundary layer. In *Heat Transfer Studies: A Festschrift for E. R. G. Eckert*}. T. S. Irvine et al, eds. Hemisphere Publishing Corp., Washington, D. C., 165-185.

9. Barnes, G. M., G. D. Emmitt, B. Brummer, M. A. **LeMone** and S. Nicholls, 1980: The structure of a fair weather boundary layer based on the results of several measurement strategies. *Mon. Wea. Rev*., **l08**, 349-364.

10. **LeMone**, M. A., 1980: The marine boundary layer. Chapter in *Workshop on the Planetary Boundary Layer*. J.C. Wyngaard, ed. American Meteorological Society, 322 pp.

11. **LeMone**, M. A., 1980: On the difficulty of measuring temperature and humidity in cloud: Comments on Shallow Convection on Day 261 of GATE; Mesoscale Arcs. *Mon. Wea. Rev*., 108, 1702-1705.

12. **LeMone**, M. A., and W. T. Pennell, 1980: Comparison of turbulence measurements from aircraft. *J. Appl. Meteor.*, **19**, 1420-1437.

13. **LeMone**, M. A., and E. J. Zipser, 1980: Cumulonimbus vertical velocity events in GATE. Part I: Diameter, intensity and mass flux. *J. Atmos. Sci.*, **37**, 2444-2457.

14. Nicholls, S., and M. A. **LeMone**, 1980: The fair weather boundary layer in GATE: The relationship of subcloud fluxes and structure to the distribution and enhancement of cumulus clouds. *J. Atmos. Sci.*, **37**, 2051-2067.

15. Wyngaard, J. C., and M. A. **LeMone**, 1980: Behavior of the refractive index structure parameter in the entraining convective boundary layer. *J. Atmos. Sci.*, **37**, 1573-1585.

16. Zipser, E. J., and M. A. **LeMone**, 1980: Cumulus Vertical velocity events in GATE, Part II: synthesis and model core structure. *J. Atmos. Sci*., **37**, 2458-2469.

17. Zipser, E. J., R. J. Meitin, and M. A. **LeMone**, 1981: Mesoscale motion fields associated with a slowly moving GATE convective band. *J. Atmos. Sci*., **38**, 1725-1750.

18. Nicholls, S., M. A. **LeMone**, and G. Sommeria, 1982: The simulation of a fair weather marine boundary layer in GATE using a three dimensional model. *Quart. J. Roy. Meteor. Soc.*, **108**, 167-190.

19. **LeMone**, M. A., 1983: Momentum Flux by a line of cumulonimbus. *J. Atmos. Sci.*, **40**, 1815-1834.

20. **LeMone**, M. A., G. M. Barnes, E. J. Szoke, and E. J. Zipser, 1984: The tilt of the leading edge of mesoscale tropical convective lines. *Mon. Wea. Rev.*, **112**, 512-519.

21. **LeMone**, M. A., G. M. Barnes, and E. J. Zipser 1984: Momentum fluxes by lines of cumulonimbus over the tropical oceans. *J. Atmos. Sci.*, **41**, 1914-1932.

22. **LeMone**, M. A., and R. J. Meitin, 1984: Three examples of fair-weather mesoscale boundary layer convection in the tropics. *Mon. Wea. Rev.*, **112**, 1985-1997.

23. Jorgensen, D. P., E. J. Zipser, and M. A. **LeMone**, 1985: Vertical Motions in intense hurricanes. *J. Atmos. Sci*., **42**, 839-856.

24. **LeMone**, M. A., and L. F. Tarleton, 1986: The use of inertial altitude in the determination of the pressure field over land. *J. Atmos. and Oceanic Technology*, **3**, 650-661.

25. **LeMone**, M. A., G. M. Barnes, J. C. Fankhauser, and L. F. Tarleton, 1988: Pressure fields measured by aircraft around the cloud-base updraft of deep convective clouds. *Mon. Wea. Rev.*, **116**, 313-327.

26. **LeMone**, M. A., L. F. Tarleton, and G. M. Barnes, 1988: Perturbation pressure at the cloud base of cumulus clouds in low shear. *Mon. Wea. Rev.*, **116**, 2062-2068.

27. Jorgensen, D. P. and M. A. **LeMone**, 1989: Vertical velocity characteristics of oceanic convection, *J. Atmos. Sci.*, **46**, 621-640.

28. **LeMone**, M. A., 1989: The influence of vertical wind shear on the diameter of cumulus clouds in CCOPE. *Mon. Wea.. Rev.*, **117**, 1480-1491.

29. **LeMone**, M. A., 1990: Some observations of vertical velocity skewness in the convective planetary boundary layer. *J. Atmos. Sci*., **47**, 1163-1169.

30. Barnes, G. M., J. F. Gamache, M. A. **LeMone**, and G. J. Stossmeister, 1991: A convective cell in a hurricane rainband. *Mon. Wea. Rev*., **119**, 776-794.

31. Jorgensen, D. P., M. A. **LeMone,** and B. J.-D. Jou, 1991: Precipitation and kinematic structure of an oceanic mesoscale convective system. Part I: Convective line structure. *Mon. Wea. Rev*., **119**, 2608-2637.

32. **LeMone**, M. A., and D. P. Jorgensen, 1991: Precipitation and Kinematic Structure of an Oceanic Mesoscale Convective System. Part II: Momentum transport and generation. *Mon. Wea. Rev.*, **119**, 2638-2653.

33. Fankhauser, J. C., G. M. Barnes, and M. A. **LeMone**, 1992: Structure of a middle-latitude squall line formed in unidirectional shear. *Mon. Wea. Rev*., **120**, 237-260.

34. **LeMone**, M. A., and M. W. Moncrieff, 1993: Momentum transport by convective bands: Comparisons of highly idealized dynamical models to observations. Chapter 6, in *The Representation of Cumulus Convection in Numerical Models of the Atmosphere*, *Meteorological Monographs*, **24**, K.A. Emanuel and D.J. Raymond, editors. American Meteorological Society, 246 pp.

35. Emanuel, K., D. Raymond, A. Betts, L. Bosart, C. Bretherton, K. Droegemeier, B. Farrell, J. M. Fritsch, R. Houze, M. **LeMone**, D. Lilly, R. Rotunno, M. Shapiro, R. Smith, and A. Thorpe, 1994: Report of the first prospectus development team of the USWRP to The National Oceanographic and Atmospheric Administration and the National Science Foundation. *Bull. Amer. Meteor. Soc*., **76**, 1194-1208.

36. **LeMone**, M. A., T. Y. Chang, and C. Lucas, 1994: A note on the effects of filtering on convective-core statistics. *J. Atmos. Sci.*, **51**, 3344-3350.

37. **LeMone**, M. A., and M. W. Moncrieff, 1994: Momentum and mass transport by convective bands: Comparisons of highly idealized dynamical models to observations. *J. Atmos. Sci*., **51**, 281-305.

38. Lucas, C., E. J. Zipser, and M. A. **LeMone**, 1994: Vertical velocity in oceanic convection off tropical Australia. *J. Atmos. Sci*., **51**, 3183-3103.

39. Lucas, C., E. J. Zipser, and M. A. **LeMone**, 1994: Convective available potential energy in the environment of oceanic and continental clouds: correction and comments. *J. Atmos. Sci*., **51**, 3829-3830.

40. **LeMone**, M. A., 1995: The cumulus-topped boundary layer over the ocean. *The Boundary Layer and its Parameterization*, C.-H. Moeng., Ed., NCAR, 109-136.

41. Moeng, C.-H., and M. A. **LeMone**, 1995: Atmospheric planetary boundary layer research in the U.S.: 1991-1994. *U.S. National Report to the IUGG 1991-1994, Reviews of Geophysics, Supplement*, 923-931.

42. Blumen, W., N. Gamage, R.G. Grossman, M. A. **LeMone**, and L.J. Miller, 1996: The structure and evolution of a dry cold front over the central United States. Part II: Comparison with theory, *Mon. Wea. Rev*., **124**, 1676-1692.

43. Lucas, C., E. J. Zipser, and M. A. **LeMone**, 1996: Reply to 'Comment on Convective available potential energy in the environment of oceanic and continental clouds.' *J. Atmos. Sci*., **53**, 1212-1214.

44. Miller, L. J., M. A. **LeMone**, W. Blumen, R. L. Grossman, N. Gamage, and R. J. Zamora, 1996: The low-level structure and evolution of a dry cold front over the central United States. Part I: Mesoscale Observations, *Mon. Wea. Rev.,* **124**, 1648-1675.

45. Sun, J., J. Howell, S. K. Esbensen, , C. M. Greb, R. L. Grossman, and M. A. **LeMone**, 1996: Scale dependence of air-sea fluxes over the western Equatorial Pacific. *J. Atmos. Sci.*, **53**, 2997-3012.

46. Trier, S. B., W. C. Skamarock, M. A. **LeMone**, D. B. Parsons, and D. P. Jorgensen, 1996 Structure and evolution of the 22 February 1993 TOGA-COARE squall line: numerical simulations. *J. Atmos. Sci*., **53**, 2861-2886.

47. Jorgensen, D. P., M. A. **LeMone**, and S. B. Trier, 1997: Structure and evolution of the 22 February 1993 TOGA-COARE squall line: aircraft observations of structure, circulation, and surface energy fluxes. *J. Atmos. Sci.*, **54**, 1961-1985.

48. Trier, S. B., W. C. Skamarock, and M. A. **LeMone**, 1997: Structure and evolution of the 22 February squall line: organization mechanisms inferred from numerical simulation. *J. Atmos. Sci.*, **54**, 386-407.

49. **LeMone**, M. A., E. J. Zipser, and S. B. Trier, 1998: The role of environmental shear and thermodynamic conditions in determining the structure and evolution of mesoscale convective systems during TOGA COARE. *J. Atmos. Sci*, **55**, 3493-3518.

50. Lewis, S. A., M. A. **LeMone**, and D. P. Jorgensen, 1998: Evolution and dynamics of a squall line that occurred on 20 February 1993, during TOGA COARE. *Mon. Wea. Rev.*, **126**, 3189-3212.

51. Trier, S. B., M. A. **LeMone**, and W. C. Skamarock, 1998: Effect of three-dimensional structure on the stormwide horizontal accelerations and momentum budget of a simulated squall line. *Mon. Wea. Rev.*, **126**, 2580-598.

52. Igau, R. C., M. A. **LeMone**, and D. Wei, 1999: Updraft and downdraft cores in TOGA COARE: Why so many buoyant downdraft cores. *J. Atmos. Sci*., **56**, 2232-2245.

53. **LeMone**, M. A., M. Zhou, C.-H. Moeng, D. H. Lenschow, L. J. Miller, and R.L. Grossman, 1999: An observational study of wind profiles in the baroclinic convective planetary boundary layer. *Bound.-Layer Meteor.*, **90**, 47-82.

54. Wu, Xiaoqing and M.A. **LeMone**, 1999: Fine structure of cloud clusters within the intraseasonal oscillation during TOGA COARE. *Mon. Weath. Rev.*, **127**, 2503-2513.

55. Droegemeier, K.K., J.D. Smith, S. Businger, C. Doswell III, J. Doyle, C. Duffy, E. Foufoula-Georgiou, T. Graziano, L.D. James, V. Krajewski, M. **LeMone**, D. Lettenmaier, C. Mass, R. Pielke, Sr., P. Ray, S. Rutledge, J. Schaake, and E. Zipser, 2000: Hydrological aspects of weather prediction and flood warnings: report of the ninth prospectus development team of the U.S. Weather Research Program. *Bull. Amer. Meteor. Soc*., **81**, 2665-2680.

56. **LeMone**, M.A., 2000: Organization of atmospheric convection over the tropical oceans. Chapter in *Geophysical and Astrophysical Convection, Volume 8*, P.A. Fox and R.M. Kerr, Eds. Gordan and Break Science Publishers, The Netherlands, 390 pp., p. 145-165.

57. **LeMone**, M. A., R. Grossman, R. Coulter, M. Wesely, G. Klazura, G. Poulos, W. Blumen, J. Lundquist, R. Cuenca, S. Kelly, E. Brandes, S. Oncley, R. McMillen, B. Hicks, 2000: Land-atmosphere interaction research, early results, and opportunities in the Walnut River Watershed in Southeast Kansas: CASES and ABLE. *Bull. Amer. Meteor. Soc*., **81**, 757-780

58. Song, J, M. L. Wesely, M.A. **LeMone**, and R.L. Grossman, 2000: Estimating watershed evapotranspiration with PASS. Part II: Moisture budgets during drydown periods. *J. Hydrometeor.*, **1**, 462-473.

59. Yates, D.N., Chen, F., **LeMone**, M.A., Qualls, R., Oncley, S.P., Grossman, R.L., and Brandes, E.L.: 2001, A Cooperative Atmosphere-Surface Exchange Study (CASES) dataset for analyzing and parameterizing the effects of land-surface heterogeneity on area-averaged surface heat fluxes', *J. Appl. Meteor*., **40**, 921-937.

60. **LeMone**, M., R. Grossman, R.T. McMillen, K.N. Liou, S. Oh, S. McKeen, W. Angevine, K. Ikeda, and F. Chen, 2002: CASES-97: Late-morning warming and moistening of the boundary layer over the Walnut River watershed. *Bound.-Layer Meteor*., **104**, 1-52.

61. Chen, F., D.N. Yates, H. Nagai, M.A. **LeMone**, K. Ikeda, and R.L. Grossman, 2003: Land-surface heterogeneity in the Cooperative Atmosphere Surface Exchange Study (CASES-97). Part-I: Comparison of modeled surface flux maps with surface-tower and aircraft measurements. *J. Hydrometeor*., **4,** 196-217.

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The eBook can be downloaded and shared via the following link:
http://frontiersin.org/books/b/1057

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2. NRC 2001: *Improving the Effectiveness of U.S. Climate Modeling.* 128 pp.

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8. NRC 2008: *Observing the Weather and Climate from the Ground up: A Nationwide Network of Networks.* 200 pp.

POPULAR ARTICLES, ETC.

Electronic publications
°Backyard Science Blog (Sept. 2009 – 2013): https://www2.ucar.edu/atmosnews/perspective/

Dy	Mon	Year	Post
16	Feb	2012	Sounds of Ice https://www2.ucar.edu/atmosnews/perspective/6495/sounds-ice
3	Jan	2012	Freezing at an air temperature above 32°F (0°C) https://www2.ucar.edu/atmosnews/perspective/6172/freezing-air-temperature-above-32-f-0-c
7	Nov	2011	The Lenschow Lens https://www2.ucar.edu/atmosnews/perspective/5749/lenschow-lens
20	May	2011	A Cloud to remember, Part 2 -- Mystery solved? https://www2.ucar.edu/atmosnews/perspective/4616/cloud-remember-part-2-mystery-solved

30	Mar	2011	A cloud to remember -- and a mystery to solve https://www2.ucar.edu/atmosnews/perspective/6495/sounds-ice
3	Dec	2010	Boulder's Tempestuous Temperatures https://www2.ucar.edu/atmosnews/perspective/3359/boulder-s-tempestuous-temperatures
15	Nov	2010	Communicating about weather and climate: what are the biggest issues? https://www2.ucar.edu/atmosnews/perspective/3195/communicating-about-weather-and-climate-what-are-biggest-issues
9	Sept	2010	A close-to-home wildfire https://www2.ucar.edu/atmosnews/perspective/2587/close-home-wildfire
12	Aug	2010	A road trip through a "fair-weather" cold front https://www2.ucar.edu/atmosnews/perspective/2355/road-trip-through-fair-weather-cold-front
17	May	2010	Kingbirds catch flies in Coors Field -- and without mitts https://www2.ucar.edu/atmosnews/perspective/2118/kingbirds-catch-flies-coors-field-and-without-mitts
27	Jan	2010	Birds and the Atmospheric Boundary Layer https://www2.ucar.edu/atmosnews/perspective/1394/birds-and-boundary-layer
8	Jan	2010	Incredible Optics on a winter afternoon https://www2.ucar.edu/atmosnews/perspective/1240/incredible-optics-winter-afternoon
2	Dec	2009	Snow Depth and Density Revisited https://www2.ucar.edu/atmosnews/perspective/1035/snow-depth-and-density-revisited
5	Nov	2009	Snow Depth and Density: What's in a Foot of Snow? https://www2.ucar.edu/atmosnews/perspective/977/snow-depth-and-density-what-s-foot-snow
21	Sept	2009	Are darker-colored cars warmer inside than lighter-colored cars? https://www2.ucar.edu/atmosnews/perspective/880/are-darker-colored-cars-warmer-inside-lighter-colored-cars

Chief Scientists's Blog https://www.globe.gov/explore-science/scientists-blog/archived-posts/index.html

I started this blog in March, 2006, and maintained it through 31 March 2009, when it was taken over by four NASA scientists. Deals with environmental topics related to GLOBE's mission of environmental awareness, covering topics related to the atmosphere, soils, plants, climate, hydrology, watersheds, seasons and biomes, carbon, the oceans, and backyard science. Simple datasets are also provided. Each blog entry undergoes a formal review process that involves GLOBE staff, and for scientific topics I'm less familiar with, experts in the field.

For special events (surface temperature field campaigns, SCUBAnauts), played host to other bloggers. Among my favorite recent blogs are "Measuring the temperature using crickets," "Looking at the fall colors in a different way," and Carbon Dioxide Part 3: "Walk, drive a car, or ride a bike." The SCUBAnauts blog were bound together as part of a White House briefing.

Table of Chief Scientist's blog posts. Gray = guest blog with my introduction

Dy	Mon	Year	Post
31	Mar	2009	Farewell
10	Mar	2009	A day in the life of a scientist
25	Feb	2009	More about the "Scientific Method."
10	Feb	2009	More about the surface temperature field campaign
5	Feb	2009	More misconceptions about climate change, Part 2.
27	Jan	2009	More misconceptions about climate change, Part 1.
6	Jan	2009	Relating air temperature to surface temperature
30	Dec	2008	Chinook!
23	Dec	2008	Observing birds – Part 2
16	Dec	2008	Dr. C.'s surface temperature blog 12-16-08
15	Dec	2008	Dr. C.'s surface temperature blog 12-15-08
9	Dec	2008	Czajkowski's field campaign 9 Dec 08
4	Dec	2008	Czajkowski's field campaign 4 Dec 08
2	Dec	2008	Observing birds
2	Dec	2008	Czajkowski's 2008 field campaign – introduction
17	Nov	2008	Changes in carbon dioxide in the air
4	Nov	2008	Measuring Rain
22	Ocxt	2008	Comparing Fahrenheit and Celsius Temperatures
8	Ocxt	2008	What causes hurricane damage?
22	Sep	2008	Climate Change Misconceptions, Part II: Partial Misconceptions
16	Sep	2008	Climate change misconceptions
28	Aug	2008	Carbon dioxide, Part 3: A global look
21	Aug	2008	Carbon dioxide, Part 2: Walk, drive a car, or ride a bike?
11	Aug	2008	Release of carbon dioxide by individual humans
28	Jul	2008	500 people DO make a difference!
21	Jul	2008	Post-script to blog on temperature trends in the GLOBE student net work
15	Jul	2008	Are there temperature trends in the GLOBE students records?
2	Jul	2008	Hail and Thunderstorm draft strength
11	Jun	2008	Land use: how important for climate?
2	Jun	2008	Will there by more tropical cyclones in the future?
23	May	2008	"Fropas"
16	May	2008	Wind power
9	May	2008	Watching Clouds
25	Apr	2008	Profiles and the GLOBE Inquiry Model
15	Apr	2008	Part 5: Postscript to Missouri puddles blog
10	Apr	2008	2008 IPY Pole-to-Pole videoconference
7	Apr	2008	Puddles and soil temperature, Part 4
4	Apr	2008	Cool soil in the Summertime
25	Mar	2008	Puddles and soil temperature, Part 3: Why didn't the puddle freeze?

17	Mar	2008	Puddles and soil temperature, Part 2: Why is the water feeding the puddle not frozen?
13	Mar	2008	Puddles and soil temperature, Part I: Liquid puddles on a cold winter day
27	Feb	2008	How the temperature varies during the day and night
8	Feb	2008	Weights and Measures
29	Jan	2008	Watershed, Part 3
14	Jan	2008	Icicles and watersheds, Part 2: How much water flows off the top of two houses?
10	Jan	2008	Surface temperature field campaign: Summary
9	Jan	2008	Icicles and Watersheds, Part I: Why are the icicles so long on our house?
21	Dec	2007	Surface temperature campaign , Day 25
18	Dec	2007	Surface temperature campaign, Day 21
14	Dec	2007	Surface temperature campaign, Day 17
12	Dec	2007	SCUBAnauts, Postscript
12	Dec	2007	SCUBAnauts, Day 12
12	Dec	2007	Surface temperature campaign, Day 15
11	Dec	2007	Surface temperature campaign, Day 10
10	Dec	2007	SCUBAnauts, Day 10
10	Dec	2007	SCUBAnauts, Day 8
7	Dec	2007	SCUBAnauts, Day 7
7	Dec	2007	Surface temperature campaign, Day 9
7	Dec	2007	SCUBAnauts, Day 7
7	Dec	2007	SCUBAnauts, Day 6
4	Dec	2007	Surface temperature campaign, Day 7
3	Dec	2007	Surface temperature campaign, Day 4
2	Dec	2007	Surface temperature campaign – Day 3
30	Nov	2007	Surface temperature campaign, Day 2
28	Nov	2007	Surface temperature campaign, Day 5
28	Nov	2007	Surface temperature campaign, Day 4
27	Nov	2007	SCUBAnauts, ODC, Day 5
20	Nov	2007	SCUBAnauts, OTC, Day 4
20	Nov	2007	SCUBAnauts, SNI, Day 4
20	Nov	2007	SCUBAnauts, Day 4
16	Nov	2007	SCUBAnauts, ODC, Day 3
15	Nov	2007	SCUBAnauts, ODC, Day 2
14	Nov	2007	More about carbon dioxide
8	Nov	2007	SCUBAnauts – ODC
18	Oct	2007	Looking at the fall colors in a different way
5	Oct	2007	Measuring temperatures using crickets
7	Sep	2007	Land use and Carbon Dioxide
29	Aug	2007	The value of zeroes
16	Aug	2007	Climate change, Part 4: Carbon dioxide changes
7	Aug	2007	Climate Change Part 3. The gases in air
16	Jul	2007	What affects Earth's climate?

5	Jul	2007	It is getting warmer
--	Jun	2007	None
29	May	2007	Puddles
11	May	2007	Are there more storms than there used to be?
2	May	2007	Land use and storms
18	Apr	2007	Iowa Dewpoints – take 2
30	Mar	2007	Regional climate change – Iowa dew points and Chicago heat waves
27	Mar	2007	A final word about local climate
9	Mar	2007	Local to Global – the Seasons IPY Pole-to-Pole Video Conference
23	Feb	2007	Local climate, Part 4: Human metabolism. What is that?
16	Feb	2007	More about how people heat up cities
7	Feb	2007	Why cities are warmer than the countryside
2	Feb	2007	Climate: from your back yard to the blobe
15	Jan	2007	Snowmelt
8	Jan	2007	Snow day!!
19	Dec	2006	Altostratus clouds
12	Dec	2006	GPS. Conclusions
8	Dec	2006	More about GPS: Test for elevation
5	Dec	2006	More about GPS: Test for Position
29	Nov	2006	Taking GPS readings, Part I
1	Nov	2006	Raindrops Part 3: More about Hail
24	Oct	2006	Falling raindrops, Part 2
28	Sep	2006	Where did the rain come from?
17	Aug	2006	Watching the wind
26	Jul	2006	Fire weather
29	Jun	2006	Global Warming?
8	May	2006	GLOBE@Night. Can you see the stars?
20	Apr	2006	Looking at the seasons from space
3	Apr	2006	What is science? Part IV
20	Mar	2006	How science works
15	Mar	2006	Scientific method: One or many?
9	Mar	2006	What is Science?

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1986	Blizzard
1986	Isobar
1988	Cloud
1988	Wind
1990	Cloudburst
1990	Contrail
1990	Meteorology
1993	Frost
1998	Cloud (revision)
2001	Dew point?

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22. Barnes, G. M., M. A. LeMone, and J. F. Gamache, 1988: The structure and role of a convective cell in a hurricane rainband. Presented at *the International Conference on Tropical Meteorology*, Brisbane, Australia.

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24. Hood, R.E., R. W. Spencer, G.R. McGaughey, E. J. Zipser, D.P. Jorgensen, M. A. LeMone, and P.T. Willis, 1993: Passive microwave data combined with Doppler radar data for a TOGA-COARE squall line: displacement of the scattering signature from region of heaviest rain. AGU, San Francisco, Dec.

25. Jorgensen, D, B. Smull, D. Johnson, and M. A. LeMone, 1993: Structure and Low-Level energy fluxes associated with a fast-moving mesoscale convective system observed by aircraft during TOGA COARE, AGU, San Francisco, Dec.

26. LeMone, M. A., S. Trier, E. Zipser, K. Mohn, G. McGaughey, K.Caesar, M. Restivo, D. Jorgensen, and B. Smull, 1993: The relationship of Convective-Band Structure and Lifecycle to Environmental Soundings. AGU, San Francisco, Dec.

27. Smull, B.F., D. Jorgensen, T. Matejka, D. Johnson, and M. LeMone, 1993: Evolution of precipitation and momentum structure within a slow-moving convective band observed by airborne Doppler radar during TOGA COARE. AGU, San Francisco, Dec.

28. LeMone, M. A., 1993: Impressions on TOGA COARE: Some comparisons to the GATE experiment. Informal COARE session, *20th Conf. on Hurricanes and Tropical Meteorology*, San Antonio TX, 10-14 May 1993.

29. LeMone, M. A., and M. W. Moncrieff, 1993: Momentum and Mass fluxes by convective bands: comparison of observations to an idealized model. *20th AMS Conference on Hurricanes and Tropical Meteorology*, San Antonio, Texas, 10-14 May.

Presentations at TOGA COARE Symposium in Toulouse (These in Abstract form in *Summary Report of the TOGA COARE International Data Workshop*, Toulouse, France, 2-11 Aug. 1994. TOGA COARE International Project Office/UCAR. Section in which talk given in parentheses.

30. Jorgensen, D. P., and M. A. LeMone, 1994: Precipitation structure and momentum-flux properties of a rapidly propagating squall line system observed by multiple Doppler radars and DC-8 ARMAR radar on 22 February 1993. (Convection and Mesoscale).

31. LeMone, M. A., 1994: Momentum Generation and Transport by Convection. Abstract, (Convection and Mesoscale)

32. LeMone, M. A. 1994: The influence of mesoscale convective systems on surface stresses during westerly wind bursts. (Large Scale Atmosphere and Convection)

33. LeMone, M. A., S. Trier, M. Dey, E. J. Zipser, K. Mohn, G. McGaughey, K. Caesar, M. Restivo, D. Jorgensen, B. Smull, S. Lewis, 1994: The relationship between convective-band structure and environmental soundings. Abstract, (Convection and Mesoscale)

34. LeMone, M. A., M. Dey, D. Jorgensen, B. Smull, F. Bradley, R. Grossman, E. Zipser, 1994: Estimation of surface fluxes for two TOGA COARE MCS's. (Convection Mesoscale and Air-Aea Fluxes).

35. Smull, B. F., D. P. Jorgensen, T. J. Matejka, and M. A. LeMone, 1994: Evolving precipitation and momentum structure of a slow-moving convective band observed by airborne Doppler radar on 9 February 1993. (Convection and Mesoscale).

36. Trier, S. B., D. B. Parsons, and M. A.LeMone, 1994: Numerical simulation of the 22 February 1993 TOGA COARE squall line. (Convection and Mesoscale).

37. LeMone, M. A., and M. W. Moncrieff, 1994: Momentum and mass transports by organized convection: Comparisons of highly idealized dynamical models to observations and numerical models. Abstracts of Oral and Poster Sessions, *European Conf. on the Global Energy and Water Cycle*, Royal Meteor. Soc., London, 19-22 July 1994.

38. Pflaum, J. C., W. Blumen, R. L. Grossman, M. LeMone, J. Moore, W.T. Pennell, J. Schaake, and E. Wood, 1995: CASES: A Proposed Cooperative Atmosphere-Surface Exchange Study Site. *Cold Regions Hydrology*, Banff, Canada.

39. LeMone, M.A., S. Oncley, T. Horst, R. Grossman, J. Lundquist, R. Qualls, R. McMillen, B. Hicks, R. Coulter, and J. Klazura, 1998: Factors affecting the diurnal variation of water vapor over a mesoscale watershed: preliminary results from CASES-97. Poster presentation given as part of the *AMS Special Session on Hydrology*, Phoenix, AZ, January.

40. LeMone, M.A., Mingyu Zhou, C.-H. Moeng, D. Lenschow, and Robert Grossman, 1997: Study of wind profiles in the baroclinic convective boundary layer. *12th AMS Symp. on Boundary Layers and Turbulence*, July 28 - August 1, Vancouver, B.C.

41. LeMone, M.A., R.L. Grossman, and W. Blumen, 1998: Effect of Soil moisture on the diurnal variability of the atmospheric boundary layer. Presented at the *XIII General Assembly of the European Geophysical Society*, Nice, France, 20-24 April.

42. LeMone, M.A., and R. L. Grossman, 1998: Primary effects of soil moisture content on the diurnal variation of the structure, and moisture budgets in the fair-weather atmospheric boundary layer: CASES-97 (Walnut River Watershed, southeastern Kansas). GCIP Mississippi River Climate Conference, St. Louis, Missouri, 8-12 June 1998.

43. Grossman, R. L. and M. A. LeMone, 1998: Primary effects of soil moisture content on the diurnal variation of the structure of the fair-weather atmospheric boundary layer: CASES-97 (Walnut River Watershed, S. Central Kansas). *International Conf. of Precipitation: Predictability of Rainfall at the Various Scales*, June 29-July 1, Mauna Lani Bay, Hawaii.

44. Lewis, S. A., M. A. LeMone, and D. P. Jorgensen, 1998: Low-level structure and surface fluxes associated with the late-stage 20 February squall-line MCS. COARE98, 7-11 July, Boulder.

45. Igau, R., M.A. LeMone, and D. Wei., 1998: Updraft and Downdrafts cores in TOGA COARE: Why so many buoyant downdraft cores? COARE98, Boulder, Colorado, 7-14 July.

46. LeMone, M.A., E.J. Zipser, and S.B. Trier, 1998: The role of environmental shear and CAPE in determining the structure and evolution of mesoscale convective systems during TOGA COARE. COARE98, Boulder, Colorado, 7-14 July.

47. LeMone, M. A., R. L. Grossman, and R. Coulter, 1998: The need for longer-term sets of complementary and horizontally-distributed profile measurements in boundary-layer field campaigns (invited paper). *Fourth International Symposium on Tropospheric Profiling*. Snowmass, CO, September 21-25.

48. Grossman, R.L. and M.A. LeMone, 1998: CASES and CASES-97, A Land Surface - Atmosphere Interaction Study Opportunity. *Annual Meeting of the American Water Resources Association*, Breckenridge, CO.

49. Grossman, R. M., and M. A. LeMone, 1999: Cooperative surface-atmosphere exchange study (CASES): Background and update. GCIP PIs' meeting, Univ. Md., 17 May.

50. LeMone, M.A. 1999: The day time convective mixed layer: How mixed is it? Presented as part of the *Conference on Convective Momentum Transport*, GFDL, 7-8 October 1999.

51. Nagai, H., H. Yamazawa, M. LeMone, F. Chen, D. Yates, S. Oncley, and R. Grossman, 1999: Development of atmosphere-soil-vegetation model. *1999 Autumn Conference of Meteorological Society of Japan*, Fukuoka, Japan, 24-26 November, 1999.

52. Chen, Fei, D. Yates, M. LeMone, H. Nagai, S. Oncley, R. Qualls, and R. Grossman, 1999: A multi-scale data set for studying land-surface heterogeneith and validating land-surface models. Hydrology Program Investigators Meeting, National Aeronautics and Space Administration, 2-3 Nov. 1999, Columbia, MD.

53. LeMone, M. A. 1999: The Wind profile in the daytime atmospheric boundary layer: How mixed is it? *Convective Momentum Transport Workshop*, 7-8 October, 1999, GFDL, Princeton, NJ.

54. Chen, Fei, D. Yates, M. LeMone, H. Nagai, S. Oncley, R. Qualls, and R. Grossman, 1999: A multi-scale data set for studying land-surface heterogeneity and validating land-surface models. Hydrology Program Investigators Meeting, National Aeronautics and Space Administration, 2-3 Nov., 1999, Columbia, MD.

55. Grossman, R.L., and M.A. LeMone, 1999: CASES-97 moisture and sensible heat budgets over a midwest watershed during the morning transition: Methods and results. H41C-13 AGU Fall Meeting, San Francisco, Dec 13-17.

56. LeMone, M.A., and R.L. Grossman, 1999: CASES-97: Some features in the horizontal variability in the diurnal variation of the temperature and water vapor near the surface. H41C-12 AGU Fall Meeting, San Francisco, Dec 13-17.

57. Chen, F., R. Grossman, M.A. LeMone, H. Nagai, and D. Yates: The effects of surface processes on the evolution of the PBL and its potential effect on storm initiation. *USWRP Symposium*, Boulder, CO., 27-28 March 2000.

58. Coulter, R.L., B.M. Lesht, G.E. Klazura, D.L., Sisterson, M.L. Wesely, M.A. LeMone, and R.L. Grossman, 2000: Atmospheric Boundary Layer Experiments at the Walnut River Watershed in Kansas. *USWRP Symposium*, Boulder, CO, 27-28 March 2000.

59. Chen, F., D. Yates, M. LeMone, H. Nagai, S.Oncley, and R. Grossman, 2000: A multi-scale data set based on CASES-97 for studying the land-surface heterogeneity and for validating land-surface models, *BLT Conf.* Aspen, August.

60. Nagai, H., H. Yamazawa, M.A. LeMone, F. Chen, D. Yates, and R.L. Grossman, 2000: Validation, sensitivity analysis, and improvement of atmosphere-soil-vegetation model by using CASES-97 data. AGU, San Francisco.

61. Chen, F., D. Yates, H. Nagai, M. LeMone, R. Grossman, K. Ikeda, and L. Berry, 2000: Land-surface heterogeneity in CASES-97: Modeling, in-situ, and aircraft observations. AGU, San Francisco.

62. LeMone, M.A., and R.L. Grossman, 2000: The impact of larger-scale eddies and surface properties on PBL fluxes over land. AGU, San Francisco.

63. Grossman, R.L., D.N. Yates, M.A. LeMone, and K. Ikeda, 2000: Land-surface features associated with aircraft observations of variations in sensible heat flux: Further evidence of the effects of large eddies on surface fluxes. AGU, San Francisco.

64. LeMone, M.A., R.L. Grossman, D. Yates, F. Chen, and K. Ikeda, 2001: Mesoscale (50-km) boundary layer eddies in CASES-97. Hydrology Session H61-09, AGU Spring Meeting, May 29-June 2, Boston.

65. Chen, F., S. Trier, K. Manning, D. Yates, and P. LeMone, 2002: Implication of land-atmospheric interactions on warm season quantitative precipitation forecasts. Presented as part of *USWRP Symposium*, 22-23 April, Boulder.

66. Tewari, M., F. Chen, W. Wang, J. Dudhia, M. LeMone, K. Mitchell, M. Ek, J. Wegiel, and R. Cuenca, 2004: Numerical experiments with MM5 and WRF using the upgraded unified Noah land surface model. MMM WRF Conference.

67. LeMone, M. A., and F. Chen, 2004: The effects of surface heterogeneity on boundarly-layer structure and fluxes. 2nd International IHOP_20-2 Science Workshop. Toulouse, France, 14-17 June.

68. Holt, T., D. Niyogi, F. Chen, K. Manning, P. LeMone, and A. Queshi, 2004: Role of Land-Atmosphere interactions on convective initiation and Precipitation over the Southern Great Plains. AGU, San Francisco, December, 2004.

69. LeMone, M.A. 2006. Boundary Layer structure: how our ideas have changed in the last 40 year. *Doug Lilly Symposium*, AMS 2006 Annual Meeting, Atlanta Georgia, 29 January-2 February. Invited presentation.

70. Gorska, M., J. Vila, and M. A. LeMone, 2006: The exchange of carbon dioxide between the atmospheric boundary layer and the free atmosphere. *BLT Conf., San Diego.*

71. LeMone, M. A., F. Chen, and J G. Alfieri, 2006: Influence of land cover and soil moisture on the horizontal distribution of sensible and latent heat fluxes in SE Kansas during IHOP_2002 and CASES-97. *17th Symposium on Boundary Layers and Turbulence*, American Meteorological Society, San Diego, CA, US.

72. **Sun, J.**, and Coauthors, 2006: CO_2 transport over complex terrain [presentation]. *A Specialist Workshop: Flux Measurements in Difficult Conditions*, Integrated Land Ecosystem-Atmosphere Processes Study, Boulder, CO, US.

73. LeMone, M.A., M. Tewari, j. Dudhia, F. Chen, and J. Lundquist, 2011: Objective determination of PBL depth for evaluation of PBL Schemes. 12th Annual WRF Users' Event. Boulder, CO, 21-24 June 2011.

74. Belusic, Danijel, Zeliko Vecenaj, and Margaret A. LeMone, 2013: Longitudinal vortices in the bora wind. (some meetig in Europe).

75. Belusic, D., Z. Vecenaj, and M. LeMone, 2014: Longitude vortices in the bora wind. EGU?

76. LeMone, M. A., W. M. Angevine, C. S. Bretherton, F. Chen, J. Dudhia, E. Fedorovich, K. B. Katsaros, D. H. Lenschow, L. Mahrt, E. G. Patton, J. Sun, M. Tjernström, and J. Weil, 2020: 100 Years of Progress in Boundary-Layer Meteorology: The condensed version. 18th Symp. History, 100th Annual AMS meeting, Boston, 11-17 January.

77. LeMone, M. A. Studies of the cumulus-topped tropical marine boundary layer: Looking back and looking forward. *AGU Annual Meeting*, New Orleans, LA, 13-17 Dec.. (invited)

PRESENTATIONS ON EDUCATION OR OTHER TOPICS

1. LeMone, M.A., 2004: Early History of AMS Board on Women and minorities. Special Session on Women in the atmospheric and related sciences. 84th AMS Annual Meeting. Seattle, 11-15 January. (This talk was expanded and given several times since 2004, at NCAR, CU, University of Wisconsin, the AMS local chapter. The original version is on the AMS web site).

2. LeMone, M.A., D. Krumm, J. Fellows, and E. Geary, 2004: GLOBE: Exciting new directions for the worldwide science education program. *13th Symposium on Education*. 84th AMS annual meeting. Seattle, 11-14 January. (abstract on CD)

3. LeMone, M.A., 2004: How do you mix science and educational outreach? ASP Seminar, NCAR, 6 October.

4. LeMone, M. A., and D. P. Jorgensen, 2011: AMS and Peer Review. Presented as part of the AMS Broadcasting Conference, Miami Beach, FL. (in defense of climate science; I was AMS president right after Climategate.)

During the summers of 2004 and 2005, I have given the plenary talk at the GLOBE training workshops, held for those who train GLOBE teachers, and other venues, in my role as GLOBE Chief Scientist

5. McLaughlin, J., M.A. LeMone, and S. Sikora, 2005: GLOBE ONE: A Model of a GLOBE Project, GLOBE Annual Conference, Prague Czech Republic, August.

6. LeMone, M., 2005. Opportunities for collaboration with GLOBE. Presented at the CUAHSI meeting, Logan, Utah.

7. McLaughlin, J., M.A. LeMone, M. Seavey, and J. Washburne, 2006: Partnering Students, Scientists, and the Local Community in a Regionally-focused Field Campaign. AGU Spring Meeting, Baltimore, MD, 23-26 May.

8. At GLOBE annual Conference in San Antonio, Summer, 2007, made a presentation and led a discussion on the GLOBE Scientist Network.

9. At GLOBE PI Conference in Durham, New Hampshire, gave talk and led discussion on GLOBE Scientist Network.

During the summer of 2008, I gave multiple talks at the GLOBE Learning Expedition in Cape Town, South Africa, including :

10. A talk on the impact of 500 people in the auditorium on the temperature (500 people DO make a difference). – Plenary Session, opening ceremony
11. A talk on what GLOBE student data show about climate change (Plenary Session)
12. A talk on opportunities for GLOBE from UCAR (GLOBE Annual Conference)
13. 12 talks over two days at Cape Point National Park, on the GAWS site there.

14. During a GLOBE conference in August, 2008, I gave a talk on how GLOBE student research would play out in the future.

Regular presentation:

15. LeMone, M. A., and L. M Hartten, 2020: NSF and AMS: Their contributions to increasing opportunities for women and minorities. 18th History Symposium 100th Annual AMS meeting, Boston, 11-17 January.

GRANTS AND PROPOSALS

1986-1990 Co-Principal Investigator with G.M. Barnes: Hurricane Rainbands III: Mesoscale and Convective Scale Structure. National Hurricane Research Laboratory/ERL/NOAA

1992-1995 Co-Principal Investigator with D. Parsons: Structure and Momentum Fluxes and Warm Pool Oceanic Mesoscale Convective Systems. U.S. TOGA Project Office

1995-1996 Principal Investigator, Evolution and Impact of Warm-Pool Mesoscale Convective Systems, U.S. TOGA Project Office.

1996-present Chief Scientist for Project LEARN (Carol McLaren, PI)

1997-present Co-Principal Investigator with Sharon Lewis and David P. Jorgensen, NOAA: Effects of Tropical Mesoscale Convective Systems on the Boundary Layer and the Larger Scale

1997-2000 Co-Principal Investigator with Robert Grossman (PAOS/CU): Observing and Modeling Land Surface Effects on Boundary Layer in the Inaugural Field Program of the Cooperative Atmosphere Surface Exchange Study (CASES-971a)

1998-2001 Co-Principal Investigator with Fei Chen and David Yates, UCAR: The use of CASES Observations to Assess and Parameterize the Impact of Land-Surface Heterogeneity on Area-Integrated Surface Heat Fluxes for Large-Scale Coupled Atmosphere-Hydrology Models

2000-2002 Co-Principal Investigator with Robert Grossman (PAOS/CU): Observing and Modeling Land Surface Effects on Boundary Layer in the Inaugural Field Program of the Cooperative Atmosphere Surface Exchange Study (CASES-971a)

2002 Co-Principal Investigator with Robert Grossman (CoRA): Supplement to Observing and Modelling Land Surface Effects on Boundary Layer ...(for participation in IHOP)

2003-2008 Inspiring the next generation of explorers: the GLOBE Program (Jack Fellows, PI). NASA. Chief Scientist, Participation 3 mo./year (2003-30 Nov 2004); 6 mo/year (1 Dec. 2004-31 Dec. 2005), 3 mo. January 2006 --

2003-2006 Quantifying the relationship between vegetation cover, soil moisture, and surface temperature: constraints from satellite data, ground observations, and land surface and climate models. (PI, Eric Small, CU). Participation: 1 mo/year.

2006 –2009 Atmospheric Responses to Land Surface Forcing and Their Impact on Precipation Processes in the Southern Great Plains, Fei Chen, PI. NASA. Participation: 2 months/year.

Seminars at universities (invited):
Arizona State
University of British Columbia
UCLA
Calgary University

University of Chicago
University of Colorado
Colorado State University
Northern Colorado University
Florida State University (1970s, 2012)
Iowa State University
University of Maryland
Massachusetts Institute of Technology
University of Missouri (undergraduate research project)
New Mexico Tech
Notre Dame University (2013)
University of Oklahoma
Pennsylvania State University
Purdue University
Rensselaer Institute of Technology
Texas A&M
University of Toronto
University of Utah
University of Virginia
University of Washington
University of Wisconsin
University of Wyoming

Universities outside of U.S. and Canada
University of Hamburg
National Taiwan University

DOE Labs
Brookhaven National Laboratory
Pacific Northwest National Laboratory
Argonne National Laboratory

National Severe Storms Lab

Werner Baum Memorial Lecture, 15 March 2012, Florida State University.
IBM Lecture, 9 April, Notre Dame University