

CURRICULUM VITAE

GRAEME L. STEPHENS

Department of Atmospheric Science
Colorado State University
1371 Campus Delivery
Fort Collins, Colorado, 80523-1371
970-491-3430 (phone): 970-491-8166 (fax)
stephens@atmos.colostate.edu
<http://cloudsat.atmos.colostate.edu>

EDUCATION:

University of Melbourne Melbourne, Australia	<i>B.S. Degree w/honors</i> <i>(Physics/Meteorology)</i>	1973
University of Melbourne Melbourne, Australia	<i>Ph.D. Degree</i> <i>(Meteorology)</i>	1977

EMPLOYMENT:

Director of the Center for Climate Sciences , 2010 (Sept)-present	<i>Jet Propulsion Laboratory,</i> <i>California Institute of Technology</i> <i>Pasadena, California</i>
CIRA Director 2008-2010	<i>Cooperative Institute for Research in the Atmosphere</i> <i>Colorado State University</i> <i>Fort Collins, Colorado</i>
University Distinguished Professor 2005-2010	<i>Department of Atmospheric Science</i> <i>Colorado State University</i> <i>Fort Collins, Colorado</i>
Professor 1991-2005	<i>Department of Atmospheric Science</i> <i>Colorado State University</i> <i>Fort Collins, Colorado</i>
Associate Professor 1984-1991	<i>Department of Atmospheric Science</i> <i>Colorado State University</i> <i>Fort Collins, Colorado</i>

Affiliate Faculty 1977-1984	<i>Department of Meteorology</i> <i>University of Melbourne</i> <i>Victoria, Australia</i>
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Senior Research Scientist 1979-1984	<i>Commonwealth Scientific and Industrial Research Organization (CSIRO)</i> <i>Division of Atmospheric Research</i> <i>Victoria, Australia</i>
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Research Scientist 1977-1979	<i>Commonwealth Scientific and Industrial Research Organization (CSIRO)</i> <i>Division of Atmospheric Research</i> <i>Victoria, Australia</i>
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FELLOWSHIPS, AWARDS, HONOR SOCIETIES:

- Alan Berman Research Publication Award, Department of the Navy, National Research Laboratory, 2008
- International Association of Meteorology and Atmospheric Sciences, International Radiation Commission Gold Medal, 2008
- National Aeronautics Space Administration, Rotary Stellar Award, 2008
- National Aeronautics Space Administration, Exceptional Public Service Medal, 2008
- National Aeronautics Space Administration, Group Achievement Award-CloudSat Algorithm Development Team, 2008
- National Aeronautics Space Administration, Group Achievement Award-CALIPSO Team, 2007
- Fellow, American Association for the Advancement of Science, 2006
- University Distinguished Professor, Colorado State University, 2005
- Jule G. Charney Award, American Meteorological Society, 2005
- Fellow, American Geophysical Union, 2003
- Editorial Board Member, Atmospheric and Oceanographic Sciences Library, Kluwer Academic Publishers, 1996-Present
- Fellow, American Meteorological Society, 1994
- Abell Faculty Research and Graduate Program Support, Colorado State University, 1993
- Henry G. Houghton Award, American Meteorological Society, 1990
- Editor, Journal of Atmospheric Sciences, 1989-1994
- Halliburton New Faculty Research Award, Colorado State University, 1986.
- Associate Editor, Journal of Atmospheric Sciences, 1984-1989
- Associate Editor, Monthly Weather Review, 1981-1983

PROFESSIONAL ORGANIZATIONS: (Present and Past Memberships)

- American Geophysical Union
- American Meteorological Society
- Institute of Electrical and Electronics Engineers
- Optical Society of America
- Royal Meteorological Society

NATIONAL AND INTERNATIONAL SERVICE AND ACTIVITIES:

Year	Position
2009	Member of the International Radiation Commission, IAMS
2009	Reviewer for the NASA Postdoctoral Program (NPP), Academy of Finland and the Journal of Geophysical Research
2009	Chairman of the AMS, Atmospheric Research Awards (ARA) Committee
2008	Member of the Advisory Board for the Eclipse CFMIP2
2008-Present	Member of the Advisory Board for the EarthCARE Mission
2008	Session Chairman at the American Geophysical Union (AGU) Fall 2008 Meeting
2008	Conference and Session Chairman at the SPIE Asia Pacific Remote Sensing Conference
2007	Member NRC Committee on the strategy to mitigate the impact of sensor de-scopes and de-manifest on the NPOESS and GOES-R spacecraft
2007	Co-convener of the Fall AGU session on Cloud Models and Parameterization
2006 - Present	Member of the American Meteorological Awards Committee (ARA, ORAC, & AOS)
2006	Convener of the Fall AGU session on the A-Train
2005 - Present	Panel Member for the Climate Working Group, National Oceanic and Atmospheric Administration (NOAA)
2004 - 2006	Chairman of the Selection Committee for the Allen Prize, Optical Society of America
2003 - 2006	DEFRA, Hadley Centre Advisory Panel, United Kingdom
2003 - Present	CERES Climate Modeling and Analysis Advisory Team
2002 - 2004	Co-chair of the Radiation and Remote Sensing Instrumentation, HIAPER Project
2002 - 2004	Member of the Advisory Board for the DOE ARM on AMF
2001-2009	Member of the Orbiting Carbon Observatory (OCO) Foundation Science Team

Year	Position
2001 - 2003	Member of the GCOS/WCRP Atmospheric Observation Panel for Climate (APOC-VII)
2000 - Present	Member of the CIMSS Scientific Advisory Council
2000 - 2001	Member of the National Academy of Sciences Climate Change Feedbacks Working Group
1998	Member of the Purdue University, Department of Earth & Atmospheric Science External Review Board
1997 - 2000	Member of the U.S. National Academy of Science, Committee on Earth Sciences (CES)
1996 - Present	Distinguished Visiting Scientist at Jet Propulsion Laboratory (JPL)
1996 - 1997	Member of the Radiation Explorer in the Far InfraRed (REFIR) Project
1995 - 1999	Chairman of the Joint Scientific Committee Working Group on Radiation Fluxes (WMO)
1992 - 1994	Member of the National Research Council Board on Atmospheric Sciences and Climate (BASC)
1992 - 1993	Chairman of the NSF Facilities Advisory Council, Observing Facilities Advisory Panel (OFAP)
1991 - 1998	Member of the NASA/TRMM Science Team
1990 - 1996	Chairman of the Advisory Panel for ISCCP, National Research Council
1990 - 1993	Chairman of the Advisory Panel for NOAA's Global Precipitation Climatology Program
1989 - 1992	Member of the International Working Group on Surface Radiation Budgets
1989 - 1991	Chairman of the Committee on Atmospheric Radiation, American Meteorological Society
1988 - 1991	Member of the Climate Research Committee, National Research Council, National Academy of Sciences
1987 - 1994	Member of the Joint Scientific Committee Working Group on Radiation Fluxes (WMO)
1987 - 1990	Member of the Committee on Cloud Physics, American Meteorological Society
1987	Convener of the CloudSat Radiation Session at the International Radiation Symposium
1986 - 1989	Chairman of the Joint Working Group on Clouds and Radiation, International Radiation Commission
1986	Member of Cloud-Radiation Working Group, National STORM Program, National Oceanic and Atmospheric Administration (NOAA)
1985 - Present	Fellow of the Cooperative Institute for Research in the Atmosphere (CIRA)
1985	Member of the Science Experiment Teams, First ISSCCP Regional Experiment, (FIRE), NASA
1985	Member of the ISCCP Advisory Board
1985	Member of the Committee on Atmospheric Radiation, American Meteorological Society
1985	Member of the External Review Committee of the Climate Research Program, NASA
1985	Session Chairman and Lecturer, Short Course on Atmospheric Radiation as It Relates to Climate, American Meteorological Society
1985	Convener & Session Chairman, Clouds and Radiation Session, IAMAP/IUGG, Symposium, HI
1985	Member of the Tropical Rainfall Mission Science Steering Group
1985	Member of the ICRCCM/ITRA Working Group
1983	Chairman of the First Australian Conference on Tropical Meteorology, Royal Meteorology Society, Bureau of Meteorology, Melbourne, Australia
1983	Member of the Organization Committee of the First Australian Remote Sensing Conference, Royal Meteorology Society, CSIRO, Melbourne, Australia

TEACHING EXPERIENCE:

YEAR	LOCATION
1984 - 2010	Colorado State University, Atmospheric Science Department
1986	Summer Course on Atmospheric Radiation as it Relates to Climate NOAA/ERL
1976 - 1983	University of Melbourne in third year undergraduate Meteorology Program

COURSES TAUGHT AT COLORADO STATE UNIVERSITY:

CLASS #	TITLE	DESCRIPTION
AT 722	Atmospheric Radiation, Energetics and Climate	The role of radiative processes in the Earth's climate system concerning topics of Earth radiation and energy balance, radiative convective equilibrium, climate thermodynamics, and climate feedbacks.

AT 721	Forward & Inverse Methods of Atmospheric Radiative Transfer	Advanced concepts of radiative transfer to (I) solve typical problems of atmospheric radiative transfer and (II) use these concepts in retrieval of atmosphere parameters from measurements of radiation
AT 652	Atmospheric Remote Sensing	Basic aspects of radiation, propagation, refraction, coherent and incoherent scattering, radiative transfer. Active sensing: radar, lidar, profilers and passive sensing: microwave, satellite radiometers. The application of these techniques to atmospheric wind, temperature, moisture (vapor and condensate), aerosol, precipitation, surface properties and the Earth Radiation Budget.
AT 622	Atmospheric Radiation	Terrestrial and solar radiation propagation in the atmosphere; radiative components in energy budgets, weather systems and climate studies; remote sensing.
AT 606	Climatology	Climatic controls, distribution and analysis of climate parameters of surface and in atmosphere, climate classification, hydrologic cycle, general circulation climate change and climate modeling.
AT 621	Cloud Physics	Cloud microphysics, cloud dynamics, precipitation formation and cloud electrification
AT652	Measurement Systems & Theory	The practice of measurement providing them with an understanding of basic measurement principals and instrumentation commonly used to observe the atmosphere

FACULTY ADVISER TO COLORADO STATE UNIVERSITY DEGREE STUDENTS:

TERM	YEAR	NAME	DEG.	TITLE
Fall	1987	Robert S. Stone	M.S.	Optical Properties of Cirrus Clouds From Satellite Imagery and Radiative Transfer Calculations
Fall	1987	Takmeng Wong	M.S.	Equilibrium Climate Modeling With a One Dimensional Coupled Atmosphere-Ocean Model
Spring	1989	David P. Duda	M.S.	Microphysical and Radiative Properties of Marine Stratocumulus from Tethered Balloon Measurements
Spring	1989	Theodore T. Vroman	M.S.	MSU Brightness Temperature and its Relation to Atmospheric General Circulation
Fall	1989	Paul W. Stackhouse	M.S.	A Theoretical and Observational Comparison of Cirrus Cloud Radiative Properties
Spring	1990	K. Franklin Evans	M.S.	Polarized Radiative Transfer Modeling: An Application to Microwave Remote Sensing of Precipitation
Fall	1991	Janet M. Intrieri	M.S.	Determining Cirrus Cloud Effective Radii Using Lidar and Radar Backscatter Data
Summer	1992	Darren L. Jackson	M.S.	On the Role of SSM/I Derived Precipitable Water Over the Globe and Tropical Pacific
Summer	1992	Piotr J. Flatau	Ph.D.	Cirrus Clouds - Their Radiative, Microphysical and Macroscopic Properties
Fall	1993	Takmeng Wong	Ph.D.	On the Radiative Processes Associated with the Tropical Mesoscale Convective Systems
Fall	1993	K. Franklin Evans	Ph.D.	Microwave Remote Sensing Algorithms for Cirrus Clouds and Precipitation
Spring	1993	Frank A. Leute IV	M.S.	An Analysis of Simulated and Actual SSM/T-2 Brightness Temperature
Fall	1994	David P. Duda	Ph.D.	Macrophysical and Microphysical Influences on Radiative Transfer in Two Dimensional Marine Stratus
Spring	1994	Timothy L. Schneider	M.S.	Backscattering by Nonspherical Ice Particles at Millimeter Wavelengths: A Theoretical Study
Summer	1994	Thomas J. Greenwald	Ph.D.	Satellite Microwave Sensing of Oceanic Cloud Liquid Water: Application to the Earth Radiation Budget and Climate
Summer	1995	Vincent T. Ries	M.S.	Calibration of the Scanning Spectral Polarimeter and Measurement of

TERM	YEAR	NAME	DEG.	TITLE
				the Sky Light Polarization
Fall	1995	Paul W. Stackhouse	Ph.D.	An Assessment of the Effects of Cloud Inhomogeneity on Ice Cloud Radiative Properties
Fall	1997	Steven D. Miller	M.S.	Multiple Scattering Effects in the Lidar Pulse Stretching Problem.
Spring	1998	Andrew K. Heidinger	Ph.D.	Nadir Sounding of Clouds and Aerosol in the O ₂ A-band
Spring	1998	Philip T. Partain	M.S.	Absorption of Solar Radiation by Heterogeneous Atmospheres: A New Approach to Monte Carlo Modeling
Spring	1998	Charles J. Drummond	M.S.	A Novel K-Distribution Parameters Development System and its Application of Mas/Success Channels
Spring	2000	Steven D. Miller	Ph.D.	A Multi-Sensor Approach to the Retrieval and Model Validation of Global Cloudiness
Fall	2001	Tristan S. L'Ecuyer	Ph.D.	Uncertainties in Space-based Estimates of Clouds and Precipitation: Implications for Deriving Global Diabatic Heating
Fall	2001	Angela Benedetti	Ph.D.	Toward Assimilation of Cloud Radar Data for Improvements in Mesoscale Forecasts
Spring	2002	John M. Haynes	M.S.	Microphysical Properties of Dynamically Forced Cirrus Associated with Strong Jet Streams and Their Relation to the Synoptic Scale Flow
Spring	2002	Matthew Christi	M.S.	On Retrieving Profiles of CO ₂ in the Lower Atmosphere Using Spectroscopy in the Near and Far Infrared: A Preliminary Study
Summer	2002	Matthew A. Rogers	M.S.	Radar and Optical Depth Retrieval of Marine Stratocumulus Cloud Properties using LES Modeling
Summer	2002	Cristian Mitrescu	Ph.D.	Retrieved Optical Properties for Cirrus Clouds Over Tropical West Pacific
Spring	2003	Lyle Pakula	M.S.	Moisture Feedbacks in the Tropical Atmosphere
Summer	2004	Steven Cooper	Ph.D.	Implications of Atmosphere and Cloud State Uncertainties for the Global Retrieval of Ice Microphysical Properties
Summer	2004	Christian D. Goering	M.S.	Retrievals of column ozone and aerosol properties from UV-MFRSR solar irradiance measurements during MCMA 2003
Spring	2005	Todd Ellis	M.S.	Evaluation of International Satellite Cloud Climatology Project (ISCCP) D2 Cloud Amount Changes and their Connections to Large-Scale Dynamics
Fall	2005	Matthew Lebsock	M.S.	Modeling Polarized Radiances Towards the Development of an Aerosol Retrieval Method
Fall	2005	Kyle Leesman	M.S.	Development and Validation of a 3-Channel Optimal Estimation Cloud Top Effective Radius and Optical Thickness Retrieval
Fall	2005	Shanna Pitter	M.S.	Plan B Student-No Thesis Required
Spring	2006	Taylor, Tommy	M.S.	Ozone and Aerosol Optical Properties from Ground Based Ultra-Violet Irradiance Measurements
Summer	2006	Lyle Pakula	Ph.D.	On the Paradox of Convectively Coupled Waves
Summer	2006	Derek Posselt	Ph.D.	Application of Advanced Data Assimilation Techniques to the Study of Cloud and Precipitation Feedbacks in the Tropical Climate System.
Spring	2008	John Haynes	Ph.D.	The Near Global Distribution of Light Rainfall from CloudSat
Summer	2008	Todd Ellis	Ph.D.	Characteristics of Precipitation: CloudSat Observations and Model Predictions of the Current and Future Climate
Summer	2008	Taryn Haladay	M.S.	Characteristics of Tropical Thin Cirrus Clouds as Seen Jointly by Cloudsat and CALIPSO
Summer	2008	Matthew Rogers	Ph.D.	Properties of the tropical hydrologic cycle as analyzed through 3-d-k means analysis
Spring	2009	Victoria Sankovich	M.S.	A Comparison of ECMWF Global Cloudiness Forecasts with CloudSat Observations
Spring	2009	Rachel Storer	M.S.	Modeling Aerosol Impacts on Convection Under Differing Storm Environments

TERM	YEAR	NAME	DEG.	TITLE
Spring	2009	Scott Stevens	M.S.	A ground-based analysis of the transition from warm cloud to rain
Summer	2009	Matthew Lebsock	Ph.D.	Relationship Between Aerosol, Cloud and Precipitation as Observed From the S-Trin Constellation of Spaceborne Sensors
Spring	2010	Robert Seigel	M.S.	Simulating the Effects of Coated Ice Nuclei in the Formation of Thin Ice Clouds in the High Arctic Using RAMS
Fall	2010	Natalie Tourville	M.S.	CloudSat Tropical Cyclone Database
Fall	2010	David Henderson	M.S.	The Earth's Energy balance inferred from A-Train observations
Fall	2010	Norm Wood	Ph.D.	Estimation of snow microphysical properties with application to millimeter-wavelength radar retrievals of snowfall rate.

CURRENT STUDENTS:

- Christi, Matthew–Ph.D (E.C. 2011)
 - McGarragh, Gregory–M.S. (E.C. 2011)
 - Matthew Christensen–Ph.D. (E.C. 2011)
 - Brant Dodson-Ph.D. (E.C. 2011)
 - Matthew Igel-M.S. (E.C. 2012)
- (E.C. -- expected completion date)

CONFERENCE PROCEEDINGS, SEMINARS AND REPORTS:

1. Stephens, G.L., 1976: The transfer of radiation through vertically non-uniform stratiform clouds. *Proceedings of the Symposium on Radiation in the Atmosphere*, Garmish Partenkirchen, H. J. Bolle (Ed.), 183-185.
2. Stephens, G.L., 1979: Optical properties of eight water cloud types. *CSIRO Div. of Atmos. Phy.*, Tech. Paper No. 36.
Preisendorfer, R.W. and G.L. Stephens, 1980: The application of invariant imbedding for radiative transfer solutions in arbitrarily shaped finite optical media. *International Radiation Symposium*, Fort Collins, Colorado, 422-424, extended abstract.
3. Stephens, G.L., 1980: On radiative equilibrium and radiation relaxation. *Intern. Radiation Symposium*, Fort Collins, Colorado, 280-282, extended abstract.
4. Webster, P.J. and G.L. Stephens, 1980: Cloud-climate relationships. *Intern. Radiation Symposium*, Fort Collins, Colorado, 265-268, extended abstract.
5. Webster, P.J. and G.L. Stephens, 1980: Gleaning CO₂-climate relationships from model calculations. *Australian Academy of Sciences Conference on CO₂*, Editor G. I. Pearman, Canberra.
6. Stephens, G.L., 1981: The transfer of 3.7 μm radiative through model cirrus cloud. *Preprint Vol. 4th Conf. of Atmos. Radiation (Toronto)*, AMS, 214-216.
7. Stephens, G.L., 1983: The influence of radiative cooling of cumulus cloud on the tropical atmosphere. *Australian Conference on Tropical Meteorology*, Extended Abstract, 69-71.
8. Stephens, G.L., 1985: Clouds and radiation. *ECMWF Seminar Series*, Bracknell, United Kingdom, 1985.
9. Stephens, G.L., 1985: Radiation schemes. *ECMWF Seminar Series*, Bracknell, United Kingdom, 1985.
10. Stephens, G.L., 1985: Effect of radiation on microphysics and mesometeorology of clouds, *IAMAP/IAPSO Joint Assembly*, Hawaii, 1985.

11. Ackerman, S.A. and G.L. Stephens, 1986: The absorption of solar radiation by cloud droplets. *Proceedings of the 6th Conf. on Atmos. Radiation, AMS, Williamsburg, Virginia, May 1986.*
12. Stephens, G.L., 1986: Radiative transfer through realistic atmospheres. *Proceedings of the 6th Conf. on Atmos. Radiation, AMS, Williamsburg, Virginia, May 1986.*
13. Stephens, G.L, 1986: AMS summer course on radiation as it relates to climate. Boulder, Colorado, Lecturer.
14. Stephens, G.L. and T. Wong, 1986: The effects of clouds on climate as deduced from simple models. *Proceedings of the CMS/AMS International Radiation Symposium, Beijing, China, September 1987.*
15. Stephens, G.L., 1987: Aspects of radiative transfer in a realistic atmosphere: Implications to remote sensing, parameterization and climate modeling. *Goddard Space Flight Center Seminar Series, Greenbelt, Maryland, May 18, 1987.*
16. Stephens, G L., 1987: The atmosphere as a research window: Signal or noise. *Proceedings of the 21st International Symposium on Remote Sensing of Environment (Ann Arbor, Michigan), 133-146.*
17. Stephens, G.L., 1987: Global climate change. *NASA Langley Seminar Series, Hampton, Virginia, November 20, 1987.*
18. Stephens, G.L., 1987: The atmosphere as a research window: Signal or noise. *Proceedings of the 21st International Symposium on Remote Sensing of Environment, Ann Arbor, Michigan, 133-146.*
19. Stephens, G.L., 1987: Radiative transfer through a heterogenous cloudy atmosphere. Presented at the *Clouds in Climate II: A WCRP Workshop on Modeling and Observations. Columbia, Maryland, October 19-23, 1987.*
20. Stone, R.S. and G.L. Stephens, 1987: Optical properties of cirrus clouds from satellite imagery and radiative transfer calculations. *Atmos. Sci. Blue Book #425, Colorado State University, Fort Collins, Colorado.*
21. Tsay, S.C., J.M. Davis, G.L. Stephens, S.K. Cox and T.B. McKee, 1987: Backward Monte Carlo computations of radiation propagating in horizontally inhomogeneous media. Part I: Description of codes. *CIRA Report, Colorado State University, Fort Collins, Colorado.*
22. Wong, T. and G.L. Stephens, 1987: Equilibrium climate modeling with a one dimensional coupled atmosphere-ocean model. *Atmos. Sci. Blue Book #424-Colorado State University, Fort Collins, Colorado.*
23. Evans, K.F., and G.L. Stephens, 1988: An Observational and Theoretical Study of the Remote Sensing of Rainfall Using Passive Microwave Radiation. *International Radiation Symposium, Lille, France, August 18-24, 1988.*
24. Flatau, P.J., G.L. Stephens and B.T. Draine, 1988: Scattering on Hexagonal Ice Crystals: Discrete Dipole and Anomalous Diffraction Approximations. *Proceedings of the International Radiation Symposium, Edited by J. Lenoble and J.F. Geleyn, pp. 72-75, Lille, France, August 18-24, 1988.*
25. Flatau, P.J., G.L. Stephens and B. Draine, 1988: Light scattering in the discrete dipole approximation: Exploiting the Block-Toeplitz structure. *FIRE Science Experiment Team Meeting, Vail, Colorado, July 11-15, 1988.*
26. Flatau, P.J., G.L. Stephens and B. Draine, 1988: Radiative properties of visible and subvisible cirrus: Scattering on hexagonal ice crystals. *FIRE Science Experiment Team Meeting, Vail, Colorado, July 11-15, 1988.*
27. Greenwald, T.J. and G.L. Stephens, 1988: Application of a doubling-adding radiation model to visibility problems. *CIRA Final Report, March 1988.*
28. Stephens, G.L., Aspects of cloud climate controversy. Pennsylvania State University, State College, Pennsylvania, January 28, 1988.
29. Stephens, G.L., 1988: Theory of cloud radiation interaction and climate: Emphasis on feedback mechanisms. *Reprints - Cloud Base Measurement Workshop, Aspendale, Australia, February 29- March 3, 1988.*

30. Stephens, G.L., 1988: Some outstanding problems on the influence of clouds on radiation. *Preprints: 10th International Cloud Physics Conference*, Hamburg, West Germany, August 10-14, 1988.
31. Stephens, G.L. and D.E. Stevens, 1988: Cloud radiative interactions on the dynamics of the tropical atmosphere. *Proceedings of the International Radiation Symposium*, Lille, France. Edited by J. Lenoble and J.F. Geleyn, pp. 126-129. Lille, France, August 18-24, 1988.
32. Stephens, G.L., 1988: Global climate change. *KNMI Seminar*, Utrecht, The Netherlands, August 26, 1988.
33. Stephens, G.L., 1988: On the cloud absorption anomaly. University of Arizona Seminar Series, Tucson, Arizona, October 14, 1988.
34. Stephens, G.L., 1988: On the cloud absorption anomaly. University of Chicago Seminar Series, Chicago, Illinois, November 3, 1988.
35. Stephens, G.L. and T.J. Greenwald, 1988: An atlas of the satellite observations during the EMEX aircraft missions. *Atmos. Sci. Report*, November 1988.
36. Stephens, G.L., and T. Wong, 1988: On the use of satellite data in the study of heating by cloud disturbances during EXEX. Presented at the *International Conference on Tropical Meteorology*. University of Queensland, Brisbane, Australia, July 4-8, 1988.
37. Duda, D. and G.L. Stephens, 1989: Microphysical and Radiative Properties of Marine Stratocumulus from Tethered Balloon Measurements. *Atmos. Sci. Blue Book #453-Colorado State University*, Fort Collins, Colorado.
38. Flatau, P.J., G.A. Dalu, W.R. Cotton, G.L. Stephens and A.J. Heymsfield, 1989: Mixed Layer Model of Cirrus Clouds: Growth and Dissipation Mechanisms. *Preprints: Symposium on the Role of Clouds in Atmospheric Chemistry and Global Climate*, Anaheim, California, January 29-February 3, 1989.
39. Duda, D.P., G.L. Stephens and S.K. Cox, 1989: The radiation budget of stratocumulus clouds measured by tethered balloon instrumentation: Variability of flux measurements. *NASA CP: FIRE Science Experiment Team Meeting*, July 1989, Monterey, California.
40. Flatau, P.J., G.L. Stephens, 1989: The Block-Toeplitz Matrices - Application to light scattering by rectangular solids in the discrete dipole approximation. *FIRE Science Experiment Team Meeting*, Monterey, California.
41. Stackhouse, P. and G.L. Stephens, 1989: A theoretical and observational comparison of cirrus cloud radiative properties. *Atmos. Sci. Blue Book #452-Colorado State University*, Fort Collins, Colorado.
42. Stackhouse, P.W. Jr., G.L. Stephens and S.K. Cox, 1989: Cirrus radiative characteristics and the radiative impact of small particles. *NASA CP: FIRE Science Experiment Team Meeting*, Monterey, California.
43. Stephens, G.L., P.J. Flatau, S.C. Tsay, and P. Hein, 1989: Radiative diffusivity factors in cirrus and stratocumulus clouds - Application to two-stream models. *FIRE Science Experiment Team Meeting*, Monterey, California.
44. Stephens, G.L., 1989: Cirrus clouds and climate feedback: Is the sky falling and should we go and tell the king? *NASA CP: FIRE Science Experiment Team Meeting*, Monterey, California.
45. Stephens, G.L., 1989: Aspects of cloud-climate feedback. *Preprints: Symposium on the Role of Clouds in Atmospheric Chemistry and Global Climate*, Anaheim, California, January 29-February 3, 1989.
46. Stephens, G.L. and D.E. Stevens, 1989: Cloud radiative interactions on the dynamics of the tropical atmosphere. *Preprints: Symposium on the Role of Clouds in Atmospheric Chemistry and Global Climate*, Anaheim, California, Jan. 29-February 3, 1989.
47. Stevens, D.E., Qi Hu, G.L. Stephens and D. Randall, 1989: The hydrologic cycle of the intraseasonal oscillation. *Reprints: Western Pacific International Meeting and Workshop on TOGA COARE*, Noumea, New Caledonia, May 24-30, 1989.

48. Tsay, S.C. and G.L. Stephens, 1989: Mie computation for coated spheres: Description of codes and applications. *CIRA Report-Colorado State University*, Fort Collins, Colorado.
49. Vivekanandan, J. Turk and G.L. Stephens, 1989: Joint analysis of multiparameter radar and radiometer measurements of convective storms. Preprints: *24th Radar Met. Conference*, Florida, March 27-31, 1989.
50. Vroman, T. and G.L. Stephens, 1989: Microwave brightness temperature and its relation to atmospheric general circulation features. *Atmos. Sci. Blue Book #454-Colorado State University*, Fort Collins, Colorado.
51. Dalu, G.A., P.J. Flatau, R.A. Pielke and G.L. Stephens, 1990: Horizontal structure of cirrus clouds -- Analytical theory. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27.
52. Flatau, P.J., P.W. Stackhouse and G.L. Stephens, 1990: Radiative Transfer Code for use in Cloud and Mesoscale Models Case of Ice Clouds. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990.
53. Flatau, P.J., G.L. Stephens, and B.T. Draine, 1990: The Block-Toeplitz Matrices - Application to light scattering by rectangular solids in the discrete dipole approximation. In *IMACS 1st International Conference on Computational Physics*, K. Gustafson and W. Wyss, Editors, June 11-15, Association Internationale Pour les Mathematiques et Calculateurs en Simulations, University of Colorado, Boulder, Colorado, 337-340.
54. Gabriel, P., S.C. Tsay and G.L. Stephens, 1990: Radiative transfer in inhomogeneous clouds. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990.
55. Greenwald, T.J., G.L. Stephens and T.H. Vonder Haar, 1990: Nimbus--7 observations of the effect of clouds on the earth's radiation budget. *CIRA Report ISSN 0737-5352-19*, August 1990.
56. Intrieri, J.M., W.L. Eberhard and G.L. Stephens, 1990: Preliminary comparisons of lidar and radar backscatter as a means of assessing cirrus radiative properties. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990.
57. Stephens, G.L., 1990: Cloud radiation interaction and the earth's climate: Relevance to the climate of the arctic. *International Conference on the Role of the Polar Regions in Global Change*, Fairbanks, Alaska, June 11-15, 1990.
58. Tjemkes, S.A., D.A. Randall and G.L. Stephens, 1990: Passive microwave observations of atmospheric water vapor and its comparison to a GCM. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990.
59. Tsay, S.C. and G.L. Stephens, 1990: A physical/optical model for atmospheric aerosols with application to visibility problems. *CIRA Report ISSN 0737-5352-16*. January 1990.
60. Wong, T., P.W. Stackhouse, G.L. Stephens and F. Valero, 1990: A comparison of cloud radiation fields obtained by *In Situ* aircraft measurements and a numerical simulation of a tropical mesoscale convective system. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990.
61. Stephens, G.L., 1990: Parameterization of subgrid scale cloud radiative transport processes for atmospheric prediction models: Present, past and future. Reprints: *Indo--U.S. Seminar on The Parameterization of Subgrid--Scale Processes in Dynamical Models for Medium--Range Prediction and Global Climate*, Pune, India, August 6-10, 1990, Pune.
62. Evans, K.F., and G.L. Stephens, 1990: Polarized radiative transfer modeling: An application to microwave remote sensing of precipitation. *Atmospheric Science Bluebook # 461-Colorado State University*, Fort Collins, Colorado.
63. Greenwald, T.J., G.L. Stephens and T.H. Vonder Haar, 1990: Passive microwave observations of atmospheric water vapor and its comparison to a GCM. Proceedings: *AMS Conference on Cloud Physics*, San Francisco, California, July 23-27, 1990.
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190. Stephens, G.L., 2001: CloudSat and lessons for PI-led missions. Presented at the conference for *Building the capacity of university-based space research: steps to facilitate PI-led Earth Science Missions*. Boulder, Colorado, April 26, 2001.
191. Stephens, G.L., 2001: Chair of the *Community Climate System Model Conference*. Breckenridge, Colorado, June 26, 2001.
192. Benedetti, A., and G.L. Stephens, 2002: Toward assimilation of cloud radar data for improvements in mesoscale forecasts. *Atmospheric Science Bluebook #720-Colorado State University*, Fort Collins, Colorado, 80523-1371.
193. Cooper, S.J., T.S. L'Ecuyer, and G.L. Stephens, 2002: Characterization of convectively coupled thin cirrus clouds from TRMM data using an enhanced split-window technique. Presented at the *First International TRMM Conference*, Honolulu, Hawaii, July 22-26, 2002.
194. Christi, M.J., and G.L. Stephens, 2002: On Retrieving profiles of CO₂ in the lower atmosphere using spectroscopy in the near and far infrared: A preliminary study. *Atmospheric Science Bluebook #728-Colorado State University*, Fort Collins, Colorado.
195. Engelen, R.J., and G.L. Stephens, 2002: CO₂ retrievals IR sounding measurements and its influence on temperature retrievals. Presented at the *International TOVS Study Conference-XII*, Lorne, Australia, Feb. 27-Mar. 5, 2002.
196. Haynes, J.M., and G.L. Stephens, 2002: A composite and microphysical study of jet stream cirrus over the ARM site. Proceedings of the *Twelfth Annual ARM Science Team Meeting*, St. Petersburg, Florida, April 8-12, 2002.
197. Haynes, J.M., and G.L. Stephens, 2002: Microphysical properties of dynamically forced cirrus associated with strong jet streams and their relation to the synoptic scale flow. *Atmospheric Science Bluebook #722-Colorado State University*, Fort Collins, Colorado.
198. Labonnote, L., and G. L. Stephens, 2002: Capability of polarization measurements to infer aerosol optical properties. Presented at *Ball Aerospace*, Boulder, Colorado, September 5, 2002.

199. L'Ecuyer, T. S., and G.L. Stephens, 2002: Monitoring the earth's energy budget in the TRMM/GPM era. Presented at the *First International TRMM Conference*, Honolulu, Hawaii, July 22-26, 2002.
200. L'Ecuyer, T.S., and G.L. Stephens, 2002: Uncertainties in space-based estimates of clouds and precipitation: Implications for deriving global diabatic heating. *Atmospheric Science Bluebook #721*, Colorado State University, Fort Collins, Colorado.
201. Stephens, G.L., 2002: CloudSat: Overview and perspectives on a university-led PI satellite missions. Presented at the *K. D. Wood Colloquim*, University of Colorado, Boulder, CO, April 29, 2002.
202. Stephens, G.L., 2002: Toward understanding the cloud-aerosol interactions in relation to global climate: A global-scale perspective. Presented at the *Round Table on Aerosol, Cloud, and Radiation Interactions*, Toulouse, France, July 23-29, 2002.
203. Stephens, G.L., J.M. Haynes, and N.B. Wood, 2002: BUGSRAD and the CSM and their influence on atmospheric model climatology. Presented at the *NCAR Atmospheric Modeling Workshop*, Boulder, Colorado, April 4, 2002.
204. Stephens, G.L., R.A. Pielke Sr., and D.K. Krumm, 2002: Application of GLOBE protocols to the study of land-atmosphere climate feedbacks. Presented at the *7th Annual GLOBE Conference*, Chicago, Illinois, 22-26, July, 2002.
205. Stephens, G.L., I. Wittmeyer, and D.K. Krumm, 2002: Improving scientific value through quality control of data collected according to the GLOBE atmosphere investigation protocols. Presented at the *7th Annual GLOBE Conference*, Chicago, Illinois, 22-26, July 2002.
206. Stephens, G.L., 2002: Global observations of clouds and precipitation for use in weather and climate studies. ECMWF Invited Lecture Series, Reading, United Kingdom, December 9, 2002.
207. Austin, R.T., T.S. L'Ecuyer, and G.L. Stephens, 2003: Validation and development of GPM algorithms using the A-Train suite of instruments. Presented at the *Global Precip. Measurement Workshop*, The Netherlands.
208. Benedetti, A., G.L. Stephens, and J. Haynes, 2003: Ice water content retrievals using an estimation theory approach: Examples from the NASA CRYSTAL-FACE experiment. Presented at the EGS-AGU-EUG Joint Assembly, Nice, France, April 2003.
209. Cooper, S.J., T.S. L'Ecuyer, and G.L. Stephens, 2003: Towards quantifying the distribution and microphysical properties of southern hemisphere cirrus clouds. Presented at the *AMS International Conference on Southern Hemisphere Meteorology and Oceanography*, 7, New Zealand.
210. Haynes, J.M., G.L. Stephens, and K.J. Leesman, 2003: Ice cloud microphysics retrievals for the broadband radiative heating project. Presented at the *ARM Science Team Meeting*, Broomfield, Colorado, March 31-April 1, 2003.
211. Kalaaji, R., 2003: Satellite explores clouds – researcher hopes project clears up climate process. *Fort Collins Coloradoan, Section B*, 17 January 2003.
212. L'Ecuyer, T.S., and G.L. Stephens, 2003: Monitoring the global energy budget and hydrologic cycle with TRMM and the afternoon "A-Train". Presented at the *CMOS 37th Congress*, Ottawa, Canada, June 2-5, 2003.
213. Limaye, S.S., R.A. Pertzborn, D.M. Butler, L. Wigbels, C. Conroy G.L. Stephens, R. Pielke and D. Krumm GLOBE - A unique partnership between scientists and schools to education the next generation about earth systems science. Presented at the *90th Indian Science Congress*, Bangalore, India, January 2-7, 2003.
214. Stephens, G.L., 2003: CloudSat and the EOS Constellation: IGARS, Toulouse, France, July 21-23, 2003.
215. Stephens, G.L., 2003: The CloudSat Mission and the Study of the Global Water Cycle. *Invited Seminar Series*, Bureau of Meteorology Research Centre, Melbourne, Australia.
216. Stephens, G.L., 2003: The CloudSat Mission and the A-Train. Centennial Section of the American Society of Mechanical Engineers (ASME).

217. Stephens, G.L., 2003: Life After CloudSat and the A-Train and Beyond Earthcare. Presented at the *CloudSat Science Team Meeting*. March 3-7, 2003, Broomfield, Colorado.
218. Stephens, G.L., 2003: Institute for Pure and Applied Mathematics (IPAM) Research in Industrial Projects Workshop, UCLA, Los Angeles, California.
219. Stephens, G.L., 2003: RIPS Projects Day, UCLA, Los Angeles, California.
220. Stephens, G.L., 2003: Highlights in model development and parameterization of the hydrological cycle and emerging role of data assimilation. ECMWF.
221. Stephens, G. L., 2003: GLOBE Science PI Meetings, January and April 2003.
222. Stephens, G.L., 2003: The GLOBE Learning Expedition (GLE) – student presentation on GLOBE student data supports Earth Science Satellite Missions, Croatia, July 2003.
223. Stephens, G.L., 2003: Cloud feedback in the Climate System. Imperial College, Reading, United Kingdom, December 4, 2003
224. Stephens, G.L., 2003: Vital Skies: A new initiative in the study of clouds, aerosols and precipitation. Presented to the World Climate Research Programs GEWEX Radiation Panel, Victoria, Canada, November 9-14, 2003.
225. Stephens, G.L., 2003: Remote Sensing of Clouds. Invited lecture on climate forcing, National Academies, December 17-18, 2003.
226. Stephens, G.L., 2003: Honors Speech for Ton Hollingsworth's contributions to weather forecasting, ECMWF, Reading, England, June 27, 2003.
227. Stephens, G.L., and D.G. Vane, 2003: The CloudSat Mission. Presented at IGARSS2003, Toulouse, France, July 21-25, 2003.
228. Stephens, G.L., and D.G. Vane, 2003: The CloudSat Experiment: A NASA Pathfinder Mission. Presented at the EGS-AGU-EUG Joint Assembly, Nice, France, April 2003.
229. Stephens, G.L., and N.B. Wood, 2003: Diagnosing cloud radiation feedbacks with super-parameterization. Presented at the *Super Param Meeting*, Kauai, Hawaii.
230. Stephens, G.L., N.B. Wood, H.W. Barker, and P.M. Gabriel, 2003: Parameterization of cloud-radiation interactions as relevant to climate models: A new dimension. Presented at the *DOE ARM Science Team Meeting*, Broomfield, Colorado, March 31-April 1, 2003.
231. Ellis, T.D., G.L. Stephens, and D.W.J. Thompson, 2004: Evaluation of cloud amount trends and connections to large scale dynamics. Presented at the *AMS Symposium on Global Change and Climate Variability*, Seattle, Washington, January 2004.
232. Stephens, G.L., 2004: On the retrieval of cloud and precipitation properties from space. Presented at the *AMS Conference on Satellite Meteorology and Oceanography*. Seattle, Washington, January 2004.
233. Stephens, G.L., 2005: The useful pursuit of shadows: clouds and the human culture. *Department of Atmospheric Science Colloquium*, Colorado State University, Fort Collins, Colorado, November 2, 2004.
234. Taverna, M.A., 2004: Takin' the A-Train – Multibillion-dollar international satellite system aims to reduce uncertainty behind Kyoto pact. *Aviation Week & Space Tech.*, June 14, 2004, Space Technology.
235. Stephens, G.L., 2004: On the retrieval of cloud and precipitation properties from space. *CIRA Seminar, Colorado State University*, Fort Collins, Colorado, November 2, 2004.

236. Stephens, G.L., 2004: On the retrieval of cloud and precipitation properties from space. *13th Conf. on Satellite Meteorology and Oceanography*, Norfolk, Virginia, September 20-23, 2004.
237. Stephens, G.L., 2004: Panel Member at the *Climate and Global Change Working Group*, Duck Key, FL, April 19-21, 2004.
238. Stephens, G.L., 2004: Clouds, Philosophy and Art. Presented at the *College of William and Mary*, Williamsburg, VA, invited by *The Guild of Natural Science Illustrators*, 5 July 2004.
239. Stephens, G.L., 2005: AMS Jule G. Charney Award, 2005: For Pioneering advances in understanding and measuring radiation processes and their role in climate. Acceptance speech given in San Diego, CA.
240. Stephens, G.L., 2005: Looking at clouds from both sides: Clouds in art and science. Presented for the Von Karman Lecture Series, Pasadena, California, October 2005.
241. Stephens, G.L., 2005: ARM data as a source of validation of GCM physics. Presented at the *ARM Science Team Meeting*, Daytona Beach, Florida, March 2005.
242. Stephens, G.L. and T.L. Schneider: 2005: A robust compact cloud radar (RCCR) for the DOE UAV Program. Presented at the *UAV Radar Meeting*, Daytona Beach, Florida, March 2005.
243. Stephens, G.L., 2005: Study of the direct and indirect effects of aerosol on climate. Presented at the *Earth Care Workshop*, Invited Speaker, Tokyo, Japan, April 2005.
244. Austin, R.A., and G.L. Stephens, 2006: Validation of cloud radar retrievals of ice cloud microphysics in TWP-ICE and CC-VEx. Presented at the *AGU Fall Meeting*, San Francisco, CA, December 11-15, 2006.
245. Austin, R.A., N. Wood, S. Cooper, and G.L. Stephens, 2006: Extended validation of an optimal estimation cloud property retrieval algorithm. Presented at the 16th Annual ARM Science Team Meeting, Albuquerque, New Mexico, March 27-31, 2006.
246. Barker, H., J. Cole, P. Raisanen, R. Pincus, J.J. Morcrette, J. Li, G.L. Stephens, et al., 2006: The Monte Carlo Independent Column Approximation Model Intercomparison Project (McMIP). Presented at the 16th Annual ARM Science Team Meeting, Albuquerque, New Mexico, March 27-31, 2006.
247. Haynes, J., and G.L. Stephens, 2006: Properties of tropical convection observed by ARM millimeter-radars. Presented at the 16th Annual ARM Science Team Meeting, Albuquerque, New Mexico, March 27-31, 2006.
248. Haynes, J., and G.L. Stephens, 2006: Vertical structure of tropical cloud system associated with the MJO. Presented at the *Workshop on the Organization and Maintenance of Tropical Convection and the Madden Julian Oscillation*, Trieste, Italy, March 13-17, 2006.
249. Haynes, J. and G.L. Stephens, 2006: Precipitation estimates from CloudSat using path-integrated attenuation approach. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15, 2006.
250. Jiang, J.H., N.J. Levesey, Q. Li, G.L. Stephens, H. Su, D.E. Waliser, and J. W. Waters, 2006: Using CloudSat and MLS Data to study convective effects on the upper troposphere. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15, 2006.
251. Kahn, B.H., M.T. Chahine, G.G. Mace, R. Marchand, G.L. Stephens, 2006: A combined view of CloudSat and AIRS cloud fields. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15, 2006.
252. Kempler, S., G.L. Stephens, D. Winker, G. Leptoukh, D. Reinke, P. Smith, A. Savtchenko, R. Kummerer, and J. Mao, 2006: A-Train Data Depot: Integrating, visualizing, and extracting CloudSat, CALIPSO, MODIS, and AIRS Atmospheric Measurements along the A-Train tracks. Presented at the *AGU Fall Meeting*, San Francisco, CA, December 11-15, 2006.

253. L'Ecuyer, T.S., and G.L. Stephens, 2006: Use of Markov chain Monte Carlo sampling methods to assess and improve variational MODIS cloud retrievals. Presented at the 86th *Annual American Meteorological Society Meeting*, Atlanta, Georgia, January 2006.
254. Luo, Z., and G.L. Stephens, 2006: Convection feedbacks in a super-parameterization GCM. Presented at the 16th Annual ARM Science Team Meeting, Albuquerque, NM, March 27-31, 2006.
255. Luo, Z., J.M. Haynes, G.L. Stephens, and N.B. Wood, 2006: Evaluation of a prototype multiscale modeling framework (p-MMF) representation of tropical cloud and precipitation systems using CloudSat data: Preliminary results. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15, 2006.
256. Mace, G.G., R. Marchand, G.L. Stephens, Q. Zhang, and S. Klein, 2006: The three-dimensional distribution of global cloudiness derived from CloudSat: The June-July-August 2006 Period. Presented at the *AGU Fall Meeting*, San Francisco, CA, December 11-15, 2006.
257. Pakula, L., and G.L. Stephens, 2006: Thoughts on the convectively-coupled wave paradox: discrepancy between observed and theoretical wave propagation. *Workshop on the Organization and Maintenance of Tropical Convection and the Madden Julian Oscillation*, Trieste, Italy March 13-17, 2006.
258. Posselt, D.J., T.S. L'Ecuyer, G.L. Stephens, 2006: Nonlinear non-Gaussian parameter estimation using Markov Chain Monte Carlo methods. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15, 2006.
259. Stephens, G.L., 2006: Art and Clouds in Science. Joint Center for Satellite Data Assimilation (JCSDA), February 2006.
260. Stephens, G.L., 2006: Science with a Bang! Observing our changing Earth from space. Planned Donor Luncheon, San Francisco, CA.
261. Stephens, G.L. 2006: Chair of session - Understanding the MJO: Theory, explicit convection, super-parameterization. *Workshop on the Organization and Maintenance of Tropical Convection and the Madden Julian Oscillation*, Trieste, Italy, March 13-17 March 2006.
262. Stephens, G.L., 2006: Invited Lecturer at the *European Research Course on Atmospheres (ERCA)*, Grenoble, France, January 8 -13, 2006.
263. Stephens, G.L., 2006: GPM Committee Meeting on the Future of Rainfall Measuring Missions, Irvine, CA, February 27, 2006.
264. Stephens, G.L., 2006: Keynote discussion at the NASA/NOAA/DOE UAV Workshop in Las Vegas, NV, February 28, 2006.
265. Stephens, G.L., 2006: Radiation, Clouds, Convection and Climate. Presented at the *2006 Western Pacific Geophysics Meeting*, Beijing, China. July 24-27, 2006.
266. Stephens, G.L., 2006: Satellite Observations of the Climate System. Presented at the *IGARSS IEEE 27th Canadian Symposium on Remote Sensing*, Denver, CO, July 31-August 4, 2006.
267. Stephens, G.L., 2006: Participant in the *World Federation of Scientists and the ICSC 36th Session* as an invited speaker. Erice, Sicily, August 18-26, 2006.
268. Stephens, G.L., 2006: Participant in the *University of Tokyo's Center for Climate System Research senior review*, Teruyuki Nakajima, Tokyo, Japan, October 2-6, 2006.
269. Stephens, G.L., 2006: *CloudSat Science Team Meeting, Data Products Review* as the Principal Investigator, Big Island, Hawaii, October, 16-20, 2006.
270. Stephens, G.L., 2006: Keynote speaker in the *CSRM Consortium at the University of Reading*, United Kingdom. October 7-11, 2006.

271. Stephens, G.L. 2006: CloudSat: Early highlights, applications and science. Presented at an *Atmospheric Science Colloquium*, Colorado State University, Fort Collins, Colorado, November 2, 2006,
272. Stephens, G.L., J. Haynes, and T.S. L'Ecuyer, 2006: Invited participant in the *Workshop on the Organization and Maintenance of Tropical Convection and the Madden Julian Oscillation*, Trieste, Ital, March 11-19, 2006.
273. Stephens, G.L., T.S. L'Ecuyer, S. Van den Heever, and L. Pakula, 2006: Radiation, Clouds, Convection, and Climate. Presented at University of Tokyo, Xi'ning, China, July 27-August 2, 2006.
274. Stephens, G.L., and D.G. Vane, 2006: CloudSat and the A-Train: Mission and Science Updates.
275. Stephens, G.L., and D.G. Vane, 2006: Cloud remote sensing from space in the era of the A-Train. *SPIE 6359*, doi:10.117/12.714423, p.63,5902-63,5910. Presented in Stockholm, Sweden, September 11-15, 2006.
276. Stephens, G.L., and D.G. Vane, 2006: CloudSat: Mission overview and early results. Presented at the *AGU Fall Meeting*, San Francisco, CA, December 11-15, 2006.
277. Stephens, G.L., and D.G. Vane, 2006: Presentation at the *Fourth European Conference in Radar and Meteorology and Hydrology-ERAD 2006*, Barcelona, Spain, September 18-22, 2006.
278. Stephens, G.L., N.B. Wood, 2006: *CCSM Consortium on climate variability working group*. Breckenridge, Colorado, June 20, 2006.
279. Tourville, N.D., G.L. Stephens, and D.G. Vane, 2006: CloudSat and A-Train observations of the structure of tropical storms. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15, 2006.
280. Van den Heever, S.C., N.B. Wood, and G.L. Stephens, 2006: Impacts of indirect aerosol forcing on tropical convection. Presented at the *2006 Western Pacific Geophysics Meeting*, Beijing, China, July 24-27 2006.
281. Vane, D.G., N.D. Tourville, G.L. Stephens, and A. Kankiewicz, 2006: New observations of hurricanes from the CloudSat Radar. Presented at the *AGU Fall Meeting*, San Francisco, CA, December 11- 15, 2006.
282. Waliser, D.D., J.F. Li, J. Jiang, D. Wu, G.L. Stephens, D.G. Vane, A. Tompkins, J. Chern, M. Khairoutdinov, 2006: Exploiting MLS and CloudSat data to support weather and climate model development and validation: Applications to upper troposphere cloud processes. Presented at the *AGU Fall Meeting*, San Francisco, California, December 11-15 2006.
283. Wu, D.L., R.T. Austin, J.H. Jiang, J. Li, A.J. Heymsfield, G.L. Stephens, D.G. Vane, and D.E. Waliser, 2006: Characteristics of upper-tropospheric cloud ice as revealed by MLS, TRMM, CloudSat, and ECMWF analyses. Presented at the *AGU Fall Meeting*, San Francisco, CA, December 11-15, 2006.
284. Stephens, G.L., 2008: Spatial and Temporal Characteristics of Precipitation. Presented at the *QUEST Hydrological Cycle Working Group Meeting*, Bristol, United Kingdom, April 21-23, 2008.
285. Stephens, G.L., 2008: IRC Award given to a world's key scientist who made a great contribution to the radiation community. Acceptance speech/lecture and 2 additional lectures presented at the *International Radiation Symposium*, Igau Falls, Brazil, August 3-8, 2008.
286. Stephens, G.L., and et al., 2008: Satellite Observations of Cloud and Precipitation Processes and Their Interactions. Presented at the *European Centre for Medium-Range Forecasting Workshop title "Parameterization of Subgrid Physical Processes*, Reading, England, September 1-4, 2008.
287. Stephens, G.L., 2008: What Controls Global Changes of Precipitation. Presented at the *Water Cycle Seminar at the Coop. Inst. For Climate and Ocean Research at the Woods Hole Oceanographic Institute*, Woods Hole, Massachusetts, April 30, 2008.
288. Stephens, G.L., 2008: CloudSat Status and News. Presented at the *EarthCARE Joint Meeting Advisory Group*, Noordwijk, Netherlands, May 29-30, 2008.

289. Stephens, G.L., 2008: A Remote-Sensing Perspective of Cloud Feedback in the Climate System. Presented at *IEEE International Geoscience and Remote Sensing Symposium*, Boston, Massachusetts, July 6-11, 2008.
290. Stephens, G.L., 2008: Session Topic: New Frontiers in Cloud Remote Sensing. Presented at the *International Satellite Cloud Climatology Project*, New York, New York, July 23-25, 2008.
291. Stephens, G.L., 2008: Advances in the Remote Sensing of Clouds and Precipitation from CloudSat and the A-Train. Presented at the *SPIE Asia Pacific Remote Sensing Conference*, Noumea, New Caledonia, November 17-21, 2008.
292. Stephens, G.L., 2008: Innovative Uses of Satellite Data for Evaluating Models. Presented at the *American Geophysical Union Conference*, San Francisco, California, December 15-19, 2008.
293. Stephens, G.L. and D.G. Vane, 2008: Perspectives of Future Satellite Observations for Studying Aerosol-Cloud Interactions. Presented at the *American Geophysical Union Conference*, San Francisco, California, December 15-19, 2008.
294. Stephens, G.L., 2009: Prospects for advancing our understanding of the interactions between radiation, clouds, dust and aerosols. Presented at the *Royal Meteorological Society 2009 Conference*, University of Reading, Reading, England, June 29-July 2, 2009.
295. Stephens, G.L. and D.G. Vane, 2009: Atmospheric moist processes as revealed by A-train Earth Observations. Presented at the *GEWEX/WCRP 6th International Scientific Conference on the Global Energy and Water Cycle/iLEAPS 2nd Integrated Land Ecosystem-Atmosphere Process Study Science Conference*, Melbourne, Australia, August 24-28, 2009.
296. Stephens, G.L., 2009: Low Cloud Feedbacks and Water Vapor Feedbacks. Presented at *Keck Institute for Space Studies mini-program, Climate Feedbacks and Future Remote Sensing Observations*, University of Berkeley, Berkeley, California, August 31-September 10, 2009.
297. Stephens, G.L., 2009: Warm clouds and light rain – new insights from CloudSat and the A-train. Presented at the *American Meteorological Society 34th Conference on Radar Meteorology*, Williamsburg, Virginia, October 5-9, 2009.
298. Stephens, G.L., 2009: Putting Water Vapor Feedback Back on its Feet. Invited presentation at the *American Geophysical Union Fall Mtg.*, San Francisco, CA., Dec. 14-18, 2009.
299. Stephens, G.L., R. Forbes and K. Suzuki, 2009: The use of CloudSat simulations to study cloud-precipitation processes in models. Invited presentation at the *American Geophysical Union Fall Mtg.*, San Francisco, CA., Dec. 14-18, 2009.
300. Stephens, G.L., 2010: Microwave observations of water in the sky: trends and climate change. Presented at the *Bureau International des Poids et Mesures World Meteorological Organization Conference*, Geneva, Switzerland, March 30-April 1, 2010.
301. Stephens, G.L., 2010: *Viewing Atmospheric Moist Processes from space as attest of our understanding of the planets hydrological cycle*. Presented at the *National Centre for Atmospheric Science Conference*, Manchester England, July 5-7 2010.
302. Stephens, G.L., 2010: The useful pursuit of shadows -a connection between art and science. Presented at the *Annual GLOBE Partner Meeting and Professional Development Workshop*, Calgary, Canada, July 29-Aug 3, 2010.
303. Stephens, G.L., 2010: And let there be light. Presented at the *Radiation, Clouds, Aerosols and Climate Workshop*, Sendai, Japan, Aug. 20-21, 2010.
304. Stephens, G.L., 2010: Challenges in observing the earth's climate system. Will be presented at the *Programs in Atmospheres, Oceans and Climate Retreat*, Ogunquit, Maine, Oct. 1-3, 2010.

PEER REVIEWED PUBLICATIONS:

1. Stephens, G.L., 1976: An Improved Estimate of IR Cooling in the Atmospheric Window Region. *J. Atmos. Sci.*, **33**, 806-809.
2. Stephens, G.L., 1976: The transfer of radiation through vertically non-uniform stratocumulus water clouds. *Contr. Atmos. Phys.*, **49**, 237-253.
3. Stephens, G.L., 1976: The transfer of radiation in cloudy atmosphere. Doctoral Dissertation, University of Melbourne, 1-396.
4. Stephens, G., 1978: Radiation Profiles in Extended Water Clouds. I: Theory. *J. Atmos. Sci.*, **35**, 2111-2122.
5. Stephens, G., 1978: Radiation Profiles in Extended Water Clouds. II: Parameterization Schemes. *J. Atmos. Sci.*, **35**, 2123-2132.
6. Stephens, G., G. Paltridge and C. Platt, 1978: Radiation Profiles in Extended Water Clouds. III: Observations. *J. Atmos. Sci.*, **35**, 2133-2141.
7. Stephens, G.L. and P.J. Webster, 1979: Sensitivity of Radiative Forcing to Variable Cloud and Moisture. *J. Atmos. Sci.*, **36**, 1542-1556.
8. Stephens, G.L., 1979: Optical properties of eight water cloud types. Commonwealth Science and Industrial Research Org., Australia. Division of Atmospheric Physics, *Tech. Paper #36*, 1-35.
9. Platt, C. and G. Stephens, 1980: The Interpretation of Remotely Sensed High Cloud Emittances. *J. Atmos. Sci.*, **37**, 2314-2322.
10. Stephens, G.L., 1980: Radiative Transfer on a Linear Lattice: Application to Anisotropic Ice Crystal Clouds. *J. Atmos. Sci.*, **37**, 2095-2104.
11. Stephens, G.L., 1980: Radiative Properties of Cirrus Clouds in the Infrared Region. *J. Atmos. Sci.*, **37**, 435-446.
12. Stephens, G.L. and K.J. Wilson, 1980: The Response of a Deep Cumulus Convection Model to Changes in Radiative Heating. *J. Atmos. Sci.*, **37**, 421-434.
13. Webster, P.J. and G.L. Stephens, 1980: Tropical Upper-Tropospheric Extended Clouds: Inferences from Winter MONEX. *J. Atmos. Sci.*, **37**, 1521-1541.
14. Stephens, G.L. and P.J. Webster, 1981: Clouds and Climate: Sensitivity of Simple Systems. *J. Atmos. Sci.*, **38**, 235-247.
15. Stephens, G.L., G.G. Campbell and T.H. V. Haar, 1981: Earth Radiation Budgets. *J. Geophys. Res.*, **86**(C10), 9739-9760.
16. Barton, I.J. and G.L. Stephens, 1982: High level clouds at Darwin. *Weather*, **37**, 44-46.
17. Platt, C.M.R. and G.L. Stephens, 1982: The interaction of clouds and radiation. *Aust. Met. Mag.*, **30**(1), 97-105.
18. Stephens, G.L., 1983: The Influence of Radiative Transfer on the Mass and Heat Budgets of Ice Crystals Falling in the Atmosphere. *J. Atmos. Sci.*, **40**, 1729-1739.
19. Platt, C.M.R., A.C. Dilley, J.C. Scott, I.J. Barton, and G.L. Stephens, 1984: Remote Sounding of High Clouds V: Infrared Properties and Structures of Tropical Thunderstorm Anvils. *J. Appl. Meteor.*, **23**, 1296-1308.
20. Preisendorfer, R.W. and G.L. Stephens, 1984: Multimode Radiative Transfer in Finite Optical Media. I: Fundamentals. *J. Atmos. Sci.*, **41**, 709-724.

21. Stephens, G.L., 1984: Review: The Parameterization of Radiation for Numerical Weather Prediction and Climate Models. *Mon. Wea. Rev.*, **112**, 826-867.
22. Stephens, G. L., 1984: Scattering of plane waves by soft obstacles: Anomalous diffraction theory for circular cylinders. *Appl. Optics.*, **23**, 954-959.
23. Stephens, G.L., S. Ackerman, and E.A. Smith, 1984: A Shortwave Parameterization Revised to Improve Cloud Absorption. *J. Atmos. Sci.*, **41**, 687-690.
24. Stephens, G.L. and R.W. Preisendorfer, 1984: Multimode Radiative Transfer in Finite Optical Media. II: Solutions. *J. Atmos. Sci.*, **41**, 725-735.
25. Stephens, G.L. and P.J. Webster, 1984: Cloud Decoupling of the Surface and Planetary Radiative Budgets. *J. Atmos. Sci.*, **41**, 681-686.
26. Scott, J.C. and G.L. Stephens, 1985: A visible-infrared spectroradiometer for cloud reflectance measurements. *J. Phys. E: Sci. Instrum.*, **18**, 697-701.
27. Stephens, G., 1985: Reply. *Mon. Wea. Rev.*, **113**, 1834-1835.
28. Stephens, G.L. and J.C. Scott, 1985: A High Speed Spectrally Scanning Radiometer (SPERAD) for Airborne Measurements of Cloud Optical Properties. *J. Atmos. Oceanic Technol.*, **2**, 148-156.
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