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Education:

Ph.D. Geography, University of Colorado, 1985
M.A. Geography, University of Colorado, 1981
B.S. Physics, University of Massachusetts, 1977, cum laude

Employment:

Physicist, ESRL, National Oceanic and Atmospheric Administration,
Boulder, Colorado. November, 1995-present.
Research Associate, Cooperative Institute for Research in Environmental Sciences,
University of Colorado, Boulder. November, 1985-November, 1995.
Research Assistant, Cooperative Institute for Research in Environmental Sciences,
University of Colorado, Boulder. January, 1981- August, 1985.
Research Assistant, Institute of Arctic and Alpine Research, University of Colorado.
January, 1978- December, 1980.

Teaching Experience:

Faculty Affiliate, Department of Atmospheric Sciences
Colorado State University, Fort Collins, 2000-2003.
Graduate advisor and thesis committee member to two Ph.D. graduate students.
Lecturer, Astrophysical, Planetary, and Atmospheric Sciences Department,
University of Colorado, Boulder, 1997-2000.
Graduate advisor and thesis committee member to four Ph.D. graduate students.
Instructor, Mountain Research Station, University of Colorado.
Mountain climatology section of Field Techniques Course summers, 1982-1994.
Coordinator, Field Techniques Course (EPOB 4630), summers 1991-94.
Graduate Instructor, Department of Geography, University of Colorado.
Geography 320, "Topics in Meteorology". September-December, 1982;
Geography 321, "Topics in Climatology". January-May, 1984.
Co-taught Geography 321, "Topics in Climatology". January-May, 1985.
Teaching Assistant, Department of Geography, University of Colorado.
Labs in climatology and geomorphology, September, 1981-August, 1982.
Assisted teaching of APAS Introduction to Meteorology course, September-December, 1984.

Ph. D. Thesis Adviser for:

Gil Compo, Ph.D. 1995, University of Colorado
Matthew Wheeler, Ph.D. 1998, University of Colorado
Katherine Straub, Ph.D. 2002, Colorado State University
Eileen Hall-Mckim, Ph.D. 2007, University of Colorado

Ph. D. Committee Member for:

John Fasullo, Ph.D. 1997, University of Colorado
David Lawrence, Ph.D. 1999, University of Colorado
Flore Mounier, Ph.D. 2005, École Polytechnique, Paris.
Ademe Mekonnen, Ph.D. 2007, State University of New York, Albany

Some Professional Activities and Distinctions:

Editorial Board, Dynamics of Atmospheres and Oceans, July 2003-present.

Editor, with Brian Mapes, of "Convective Life Cycles and Scale Interactions in Tropical Waves", special issue of Dynamics of Atmospheres and Oceans, December 2006.

Member, External Advisory Committee for the Center for Multi-Scale Modeling of Atmospheric Processes, a National Science Foundation Science and Technology Center at Colorado State University.

Member, American Meteorological Society Committee on Atmospheric and Oceanic Fluid Dynamics, February 2007-present.

Chair, Program Committee, American Meteorological Society Conference on Atmospheric and Oceanic Fluid Dynamics, to be held June 2009, Stowe, Vermont.

Member, Program Committee, American Meteorological Society Conference on Meteorology and Oceanography of the Southern Hemisphere, to be held February 2009, Melbourne, Australia.

Co-Author of the White Paper: "Toward A Seamless Process for the Prediction of Weather and Climate: A collaborative effort between the WMO Programs WWRP-THORPEX and WCRP on the advancement of sub-seasonal to seasonal prediction", July 2008.

Co-Convener, Special Session on "Dynamics of the Southwest Pacific Ocean and the South Pacific Convergence Zone (SPCZ)", held at the AGU Fall Meeting, December 2007, in San Francisco.

Convener, Special Session on "Dynamics of Convectively-Coupled Equatorial Waves and the Madden-Julian Oscillation", 24th IUGG Conference, held in Perugia, Italy, July 2007.

Editor, Journal of the Atmospheric Sciences, January 2000-June 2003.

Program Committee for the Eighth International Conference on Southern Hemisphere Meteorology and Oceanography, held in Iguasu Falls, Brazil, 2006.

Contributing Author, Chapter 3, IPCC Working Group 1 4th Assessment Report.

Member, NCAR Mesoscale and Microscale Meteorology Advisory Committee, 2005.

Member, NOAA THORPEX Science Steering Committee, July 2003-2005.

Chair, American Meteorological Society Committee on Meteorology and Oceanography of the Southern Hemisphere, January 2001-January 2004.

Outstanding Scientific Paper Award from the Office of Oceanic and Atmospheric Research, NOAA, 2000, for the paper "Observations of Rossby waves linked to convection over the eastern tropical Pacific", which appeared in the Journal of the Atmospheric Sciences, 1998.

Member, AMS Committee on Meteorology and Oceanography of the Southern Hemisphere, January 1998-January 2004.

Member, CLIVAR U.S. Pacific Implementation Panel, May 2000-December, 2003.

Review Panel, NOAA Pan American Climate Studies, May-August, 2003.

Organizing committee, Pacific Implementation Workshop, January 2001.

Program Committee for the Sixth International Conference on Southern Hemisphere Meteorology and Oceanography, held in Santiago, Chile, 2000.

Program committee, Sixth Conference on Climate Variations, Nashville Tennessee, January, 1994.

Organizing committee, 18th Annual Climate Diagnostics Workshop, Boulder, November, 1993.

Recipient of the University of Colorado graduate student award for teaching excellence, May, 1984.

Publications:

- Kiladis, G. N., M. C. Wheeler, P. T. Haertel, K. H. Straub, and P. E. Roundy, 2008: Convectively coupled equatorial waves. *Rev. Geophys.*, (in press).
- Thorncroft, C. D., N. M. J. Hall, and G. N. Kiladis, 2008: Three-dimensional structure and dynamics of African easterly waves. Part III: Genesis. *J. Atmos. Sci.* (in press).
- Mekonnen, A., C. D. Thorncroft, A. R. Aiyyer, and G. N. Kiladis, 2008: Convectively-coupled Kelvin waves over tropical Africa during boreal summer: Structure and variability. *J. Climate*, (in press).
- Janicot, S., F. Mounier, F., N. M. J. Hall, S. Leroux, B. Sultan, and G. N. Kiladis, 2008: The dynamics of the West African monsoon. Part IV: Analysis of 25-90 day variability of convection and the role of the Indian monsoon. *J. Climate* (in press).
- Liebmann, B., G. N. Kiladis, L. M. V. Carvalho, C. Jones, C. S. Vera, I. Bladé, and D. Allured, 2008: Origin of convectively coupled Kelvin waves over South America. *J. Climate* (in press).
- Shinoda, T., G. N. Kiladis, and P. E. Roundy, 2008: Statistical representation of equatorial waves and tropical instability waves in the Pacific Ocean. *Atmos. Res.* (in press).
- Shinoda, T., P. E. Roundy, and G. N. Kiladis, 2008: Variability of intraseasonal Kelvin waves in the equatorial Pacific Ocean. *J. Phys. Oceanogr.* **38**, 921-944.
- Serra, Y. L., G. N. Kiladis, and M. F. Cronin, 2008: Horizontal and vertical structure of easterly waves in the Pacific ITCZ. *J. Atmos. Sci.* **65**, 1266-1284.
- Haertel, P. T., G. N. Kiladis, A. Denno, and T. Rickenbach, 2008: Vertical mode decompositions of 2-Day waves and the Madden Julian Oscillation. *J. Atmos. Sci.*, **65**, 813-833.
- Lin, J. -L, K. M. Weickmann, G. N. Kiladis, B. E. Mapes, S. D. Schubert, M. J. Suarez, J. T. Bacmeister, and M. -I. Lee, 2008: Subseasonal variability associated with Asian summer monsoon simulated by 14 IPCC AR4 coupled GCMs. *J. Climate*, **21**, 4541-4567.
- Lin, J. -L, B. E. Mapes, K. M. Weickmann, G. N. Kiladis, S. D. Schubert, M. J. Suarez, J. T. Bacmeister, and M. -I. Lee, 2008: North American monsoon and convectively coupled equatorial waves simulated by IPCC AR4 coupled GCMs. *J. Climate*, **21**, 2919-2937.
- Mounier, F., S. Janicot, and G. N. Kiladis, 2008: The West African monsoon dynamics. Part III: The Quasi-Biweekly zonal dipole. *J. Climate* **21**, 1911-1924.
- Mounier, F., G. N. Kiladis, and S. Janicot, 2007: Analysis of the dominant mode of convectively coupled Kelvin waves in the West African monsoon. *J. Climate*, **20**, 1487-1503.
- González, P. L. M., C. S. Vera, B. Liebmann, and G. N. Kiladis, 2007: Intraseasonal variability in subtropical South America as depicted by precipitation data. *Climate Dynamics*. **34**, L12708, doi: 10.1007/s00382-007-0319-9.
- Roundy, P. E., and G. N. Kiladis, 2007: Analysis of a reconstructed oceanic Kelvin wave dynamic height dataset for the period 1974-2005. *J. Climate*, **20**, 4341-4355.
- Schafer, R., S. K. Avery, K. S. Gage, and G. N. Kiladis, 2007: Wind profiler observations over the central equatorial Pacific: Optimizing processing to improve quality and height coverage. *J. Atmos. Oceanic Technol.* **24**, 1710–1725.
- Serra, Y. L., M. F. Cronin, and G. N. Kiladis, 2007: Subseasonal variance of surface meteorological parameters in buoy observations and reanalyses. *Geophys. Res. Lett.* **34**, L12708, doi:10.1029/2007GL029506.
- Kiladis, G. N., and M. J. Revell, 2006: The rains of February 2004: Forcing from the tropics? *Weather and Climate*, **26**, 21-34.
- Kiladis, G. N., C. D. Thorncroft, and N. M. J. Hall, 2006: Three dimensional structure and dynamics of African easterly waves. Part I: Observations. *J. Atmos. Sci.* **63**, 2212-2230.

- Hall, N. M. J., G. N. Kiladis, and C. D. Thorncroft, 2006: Three dimensional structure and dynamics of African easterly waves. Part II: Dynamical modes. *J. Atmos. Sci.* **63**, 2231-2245.
- Roundy, P. E., and G. N. Kiladis, 2006: Observed relationships between oceanic Kelvin waves and atmospheric forcing. *J. Climate*, **19**, 5253-5272.
- Straub, K. H., G. N. Kiladis, and P. E. Ciesielski, 2006: The role of equatorial waves in the onset of the South China Sea summer monsoon and the demise of El Niño during 1998. *Dyn. Atmos. Oceans*, **42**, 216-238.
- Swann, A, A. H. Sobel, S. E. Yuter, and G. N. Kiladis, 2006: Observed radar reflectivity in convectively coupled Kelvin and mixed Rossby-gravity waves. *Geophys. Res. Lett.* **33**, L10804, doi:10.1029/2006GL025979.
- Lin, J.-L, G. N. Kiladis, B. E. Mapes, K. M. Weickmann, K. R. Sperber, W. Lin, M. C. Wheeler, S. D. Schubert, A. Del Genio, L. J. Donner, S. Emori, J. -F. Gueremy, F. Hourdin, P. J. Rasch, E. Roeckner, and J. F. Scinocca, 2006: Tropical intraseasonal variability in 14 IPCC AR4 climate models: Part I: Convective signals. *J. Climate*, **19**, 2665-2690.
- Kiladis, G. N., K. H. Straub, and P. T. Haertel, 2005: Zonal and vertical structure of the Madden-Julian Oscillation. *J. Atmos. Sci.*, **62**, 2790-2809.
- Cooper, O. R., A. Stohl, G. Hübner, E. -Y. Hsie, D. D. Parrish, A. Tuck, G. N. Kiladis, S. J. Oltmans, B. J. Johnson, M. Shapiro, J. L. Moody, and A. S. Lefohn, 2005: Direct transport of midlatitude stratospheric ozone into the lower troposphere and marine boundary layer of the tropical Pacific Ocean. *J. Geophys. Res.*, **110**, D23310, doi:10.1029/2005JD005783.
- Haertel, P. T., and G. N. Kiladis, 2004: Dynamics of 2-day equatorial disturbances. *J. Atmos. Sci.*, **61**, 2707-2721.
- Sobel, A. H., S. E. Yuter, C. S. Bretherton, and G. N. Kiladis, 2004: Large-scale meteorology and deep convection during TRMM KWAJEX. *Mon. Wea. Rev.*, **132**, 422-444.
- Majda, A. J., B. Khouider, G. N. Kiladis, K. H. Straub, and M. G. Shefter, 2004: A model for convectively coupled tropical waves: Nonlinearity, rotation, and comparison with observations. *J. Atmos. Sci.*, **61**, 2188-2205.
- Liebmann, B., G. N. Kiladis, C. S. Vera, A. C. Saulo, and L. M. V. Carvalho, 2004: Subseasonal variations of rainfall in South America in the vicinity of the low-level jet east of the Andes and comparison to those in the South Atlantic convergence zone. *J. Climate*, **17**, 3827-3842.
- Straub, K. H., and G. N. Kiladis, 2003: The observed structure of convectively coupled Kelvin waves: Comparison with simple models of coupled wave instability. *J. Atmos. Sci.* **60**, 1655-1668.
- Straub, K. H., and G. N. Kiladis, 2003: Extratropical forcing of convectively coupled Kelvin waves during austral winter. *J. Atmos. Sci.* **60**, 526-543.
- Straub, K. H., and G. N. Kiladis, 2003: Interactions between the boreal summer intraseasonal oscillation and higher frequency tropical wave activity. *Mon. Wea. Rev.* **131**, 945-960.
- Flatau, M. K., P. J. Flatau, J. Schmidt, and G. N. Kiladis, 2003: Delayed onset of the 2002 Indian monsoon. *Geophys. Res. Lett.*, **30**, 1768, doi:10.1029/2003GL017434.
- Kiladis, G. N., 2002: La Niña teleconnections. In: *La Niña and its Impacts, Facts and Speculation*, edited by Michael H. Glantz, United Nations University Press, Tokyo, 271 pp.
- Kiladis, G. N., D. J. Seidel, K. H. Straub, 2002: Variability of the tropical tropopause. SPARC Newsletter, **18**, 18-22.
- Straub, K. H., and G. N. Kiladis, 2002: Observations of a convectively-coupled Kelvin wave in the eastern Pacific ITCZ. *J. Atmos. Sci.* **59**, 30-53.
- Marengo, J. A., T. Ambrizzi, G. N. Kiladis, and B. Liebmann, 2002: Upper-air wave trains over the Pacific Ocean and wintertime cold surges in tropical-subtropical South America leading to freezes in southern and southeastern Brazil. *Theor. Appl. Climatol.*, **73**, 223-242.
- Kiladis, G. N., K. H. Straub, G. C. Reid, and K. S. Gage, 2001: Aspects of interannual and intraseasonal variability of the tropopause and lower stratosphere. *Quart. J. Roy. Meteor. Soc.*, **127**, 1961-1984.

- Meehl, G. A., R. Lukas, G. N. Kiladis, K. M. Weickmann, A. J. Matthews, and M. Wheeler, 2001: Time and space scale interactions in the climate system: Implications for climate variability and predictability, *Climate Dyn.* **17**, 753-775.
- Revell, M. J., J. W. Kidson, and G. N. Kiladis, 2001: Interpreting low-frequency modes of Southern Hemisphere atmospheric variability as the rotational response to divergent forcing. *Mon. Wea. Rev.*, **129**, 2416-2425.
- Wheeler, M., G. N. Kiladis, and P. J. Webster, 2000: Large-scale dynamical fields associated with convectively-coupled equatorial waves. *J. Atmos. Sci.*, **57**, 613-640.
- Matthews, A. J., and G. N. Kiladis, 2000: A model of Rossby waves linked to convection over the eastern tropical Pacific. *J. Atmos. Sci.*, **57**, 3785-3798.
- Reid, S. J., A. F. Tuck, and G. N. Kiladis, 2000: On the changing abundance of ozone minima at northern mid-latitudes. *J. Geophys. Res.*, **105**, 12,169-12,180.
- Wheeler, M., and G. N. Kiladis, 1999: Convectively-coupled equatorial waves: Analysis of clouds and temperature in the wavenumber-frequency domain. *J. Atmos. Sci.*, **56**, 374-399.
- Matthews, A. J., and G. N. Kiladis, 1999: The tropical-extratropical interaction between high-frequency transients and the Madden-Julian Oscillation. *Mon. Wea. Rev.*, **127**, 661-677.
- Matthews, A. J., and G. N. Kiladis, 1999: Interactions between interannual and transient circulations and tropical convection over the Pacific. *J. Climate*, **12**, 3062-3086.
- Compo, G. P., G. N. Kiladis, and P. J. Webster, 1999: The horizontal and vertical structure of east Asian winter monsoon pressure surges. *Quart. J. Royal Meteor. Soc.*, **125**, 29-54.
- Liebmann, B., G. N. Kiladis, J. A. Marengo, T. Ambrizzi, and J. D. Glick, 1999: Submonthly convective variability over South America and the South Atlantic Convergence Zone. *J. Climate*, **12**, 1877-1891.
- Kiladis, G. N., 1998: Observations of Rossby waves linked to convection over the eastern tropical Pacific. *J. Atmos. Sci.*, **55**, 321-339.
- Kiladis, G. N., and K. C. Mo, 1998: Interannual and intraseasonal variability in the Southern Hemisphere. In: *Meteorology of the Southern Hemisphere*, edited by D. J. Karoly and D. G. Vincent, American Meteorological Society, 410 pp.
- Kiladis, G. N., and K. M. Weickmann, 1997: Horizontal structure and seasonality of large-scale circulations associated with submonthly tropical convection. *Mon. Wea. Rev.*, **125**, 1997-2013.
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- Meehl, G. A., G. N. Kiladis, K. M. Weickmann, M. Wheeler, D. S. Gutzler, and G. P. Compo, 1996: Modulation of equatorial subseasonal convective episodes by tropical-extratropical interaction in the Indian and Pacific Ocean regions. *J. Geophys. Res.*, **101**, 15,033-15,049.
- Kiladis, G. N., and M. Wheeler, 1995: Horizontal and vertical structure of observed tropospheric equatorial Rossby waves. *J. Geophys. Res.*, **100**, 22,981-22,997.
- Diaz, H. F., and G. N. Kiladis, 1995: Climatic variability on decadal to century time scales. In: *World Survey of Climatology*, vol. 16, edited by A. Henderson-Sellers, 608 pp.
- Kiladis, G. N., and S. B. Feldstein, 1994: Rossby wave propagation into the tropics in two GFDL general circulation models. *Climate Dynamics*, **9**, 245-252.
- Kiladis, G. N., G. A. Meehl, and K. M. Weickmann, 1994: Large-scale circulation associated with westerly wind bursts and deep convection over the western equatorial Pacific. *J. Geophys. Res.*, **99**, 18,527-18,544.
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- Kiladis, G. N., and K. M. Weickmann, 1992: Circulation anomalies associated with tropical convection during northern winter. *Mon. Wea. Rev.*, **120**, 1900-1923.
- Kiladis, G. N., and K. M. Weickmann, 1992: Extratropical forcing of tropical Pacific convection during northern winter. *Mon. Wea. Rev.*, **120**, 1924-1938.
- Diaz, H. F., and G. N. Kiladis, 1992: Atmospheric teleconnections associated with the extreme phases of the Southern Oscillation. In: *Paleoclimatic Aspects of El Niño/Southern Oscillation*, edited by H.F. Diaz and V. Markgraf. Cambridge University Press, 476 pp.
- Kiladis, G. N., and S. K. Sinha, 1991: ENSO, monsoon, and drought in India. In: *ENSO Teleconnections Linking Worldwide Climatic Anomalies: Scientific Basis and Societal Impact*, edited by M.H. Glantz, R.W. Katz, and N. Nicholls. Cambridge University Press.
- Kiladis, G. N., and H. F. Diaz, 1989: Global climatic anomalies associated with extremes in the Southern Oscillation. *J. Climate*, **2**, 1069-1090.
- Kiladis, G. N., H. von Storch, and H. van Loon, 1989: Origin of the South Pacific Convergence Zone. *J. Climate*, **2**, 1161-1171.
- Kiladis, G. N., and H. van Loon, 1988: The Southern Oscillation. Part VII: Meteorological anomalies over the Indian and Pacific sectors associated with the extremes of the oscillation. *Mon. Wea. Rev.*, **116**, 120-136.
- von Storch, H., H. van Loon, and G. N. Kiladis, 1988: The Southern Oscillation. Part VIII: Model sensitivity to SST anomalies in the tropical and subtropical regions of the South Pacific Convergence Zone. *J. Climate*, **1**, 325-331.
- Moses, T., G. N. Kiladis, H. F. Diaz, and R. G. Barry, 1987: Climatic effects of reversals in the mean sea level pressure gradient over the North Atlantic Ocean. *Int. J. Climatol.*, **7**, 13-30.
- Bradley, R. S., H. F. Diaz, G. N. Kiladis, and J. K. Eischeid, 1987: ENSO signal in continental temperature and precipitation records. *Nature*, **327**, 497-501.
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- Diaz, H. F., R. G. Barry, and G. N. Kiladis, 1982: Climatic characteristics of Pike's Peak, Colorado (1874-1888) and comparisons with other Colorado stations. *Mount. Res. Dev.*, **2**, 359-371.
- Barry, R. G., R. S. Bradley, and G. N. Kiladis, 1981: Synoptic climatology of the western United States in relation to climatic fluctuations during the twentieth century. *J. Climatol.*, **1**, 97-113.