

# Paul Alan Dirmeyer

Last Update: 30 November 2009

**D.O.B.:** 8 February 1964; El Paso, Texas, USA (U.S. Citizen)

**Work Address:**

Center for Ocean-Land-Atmosphere Studies  
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13639 Highland Road  
Clarksville MD 21029-1424

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**Honors:**

AMS Clarence Leroy Meisinger Award, 2006

U. Maryland Dept. of Atmospheric and Oceanic Science Distinguished Alumnus, 2009

**Employment:**

2001-current: Associate Research Scientist at the Center for Ocean-Land-Atmosphere Studies (a Center within the Institute of Global Environment and Society).

2006-2007: Assoc. Program Manager in Climate and Large-Scale Dynamics, ATM/GEO, National Science Foundation, Arlington, Virginia.

1993-2000: Research Scientist at the Center for Ocean-Land-Atmosphere Studies.

1993: Research Associate, Center for Ocean-Land-Atmosphere Interactions, Department of Meteorology, University of Maryland at College Park.

1989-1992: Graduate Research Assistant, Department of Meteorology, University of Maryland at College Park.

1986-1989: Graduate Fellow, Department of Meteorology, granted by the College of Graduate Studies and Research, University of Maryland at College Park.

1984-1986: Research Assistant, Department of Meteorology, Texas A&M University.

**Education:**

Ph.D. in Meteorology, December 1992, University of Maryland at College Park.  
Dissertation title: GCM Studies of the Influence of Vegetation on the General Circulation: The Role of Albedo in Modulating Climate Change.

M.S. in Meteorology, December 1988, University of Maryland at College Park. Thesis title: Stationary Solutions in a One-Layer Spectral Model.

B.S. in Meteorology (Magna Cum Laude), May 1986, Texas A&M University.

**Positions:**

*Chair:* GEWEX Global Soil Wetness Project (GSWP) (1996-2007).

*Member:* Global Water Cycle Program (GWCP) Interagency Working Group (2006-2007).

*Member:* United States THORPEX Executive Committee (2006-2007).

*Representative:* NSF representative to the National Science and Technology Council, Committee on Environment and Natural Resources, Subcommittee on Water Availability and Quality.

*Ex-Officio:* NCAR Community Climate System Model Scientific Steering Committee (2006-2007).

*Ex-Officio:* NCAR Community Climate System Model Advisory Board (2006-2007).

*Chair:* GEWEX Land Atmosphere System Study (GLASS) (2003-2005), *Member:* (2000-2006).

*Member:* GEWEX Modelling and Prediction Panel (GMPP) (2003-2005).

*Ex-Officio:* GEWEX Radiation Panel (GRP) (2003-2005).

*Ex-Officio:* GRP Working Group on Data Management and Analysis (2004-2005).

*Member:* IGBP Integrated Land Ecosystem-Atmosphere Process Study (ILEAPS) Scientific Steering Committee (2004-2005).

*Representative:* GEWEX representative to the Integrated Land Ecosystem Atmosphere Processes Study (ILEAPS) (2003-2005).

*Member:* AMS Committee on Hydrology (2002-2005).

*Member:* Global Water Cycle Program (GWCP) Science Steering Group (2002-2005).

*Member:* International Satellite Land-Surface Climatology Project (ISLSCP) Science Panel (1997-2005).

*Member:* US-CLIVAR Pan American Panel (1999-2003).

*Member:* NCAR Climate System Model -- Land Model Working Group, CLM Development Group (1998-2001).

*Member:* EOS International Working Group (IWG), EOS IWG Land Panel, EOS IWG Hydrometeorology Panel, LBA Science Team (1998-2002)

*Contract Faculty Member:* Climate Dynamics Program, George Mason University (Virginia) (2003-2005).

*Adjunct Member of the Graduate Faculty:* George Mason University (Virginia) (2000, 2002).

*Special Member of the Graduate Faculty:* University of Maryland at College Park (2000-2002).

**Teaching:**

*Su2004:* Land-Climate Interactions. Targeted Training Activity, Course on Climate Dynamics for Climate Research Institutes and University Lecturers, International Center for Theoretical Physics, Miramare-Trieste, Italy.

*Sp2004, Sp2005:* CLIM714 Land-Climate Interactions. George Mason University.

*F2000, F2002:* CSI759 Land-Climate Interactions. George Mason University.

**Mentoring:**

O. Reale (co-advisor) Ph.D. 1996: *Modeling the Effects on Climate Caused by the Changes in Vegetation from the Roman Classical Period*. U. Maryland College Park, Dept. Meteorology.

L. Della Vedova de Oliveira Pinto (summer sponsor) 2001: Ph.D. student, U. São Paulo, Brazil, Dept. of Atmospheric Sciences.

A. Sudradjat (co-advisor) Ph.D. 2002: *Source-sink analysis of precipitation supply to large river basins*. U. Maryland College Park, Dept. Civil Engineering.

T. D'Orgeval (summer sponsor) 2003: Ph.D. student, l'Université de Paris 6, France, Dept. Earth Sciences.

E. Lehmann (co-advisor) M.S. 2004: George Mason University, Virginia, School of Computational Sciences.

G. Dunn (summer mentor) 2004: *National Intel semi-finalist*. Science, Mathematics, Computer Science Magnet Program, Montgomery Blair High School, Silver Spring, Maryland.

B. Holbert (summer mentor) 2005: Science, Mathematics, Computer Science Magnet Program, Montgomery Blair High School, Silver Spring, Maryland.

G. Abramowitz (examiner) Ph.D. 2006: *Techniques in model-data fusion: bias identification and validation in land surface models*. Macquarie University, Australia, Dept. Physical Geography.

T. D'Orgeval (examiner) Ph.D. 2006: *Impact du changement climatique sur le cycle de l'eau en Afrique de l'Ouest : Modélisation et incertitudes*. l'Université de Paris 6, France, Dept. Earth Sciences.

S. Materia (visitor sponsor) 2007-8: Ph.D. student, Istituto Nazionale di Geofisica e Vulcanologia / Centro Euro-Mediterraneo per i Cambiamenti Climatici, Bologna, Italy, Dept. Earth Sciences.

A. Sahoo (committee member) Ph.D. 2008: *Remote sensing, land surface models and data assimilation technique for soil moisture estimation*. George Mason University, Virginia, Dept. of Climate Dynamics.

K. Arsenault (committee member) Ph.D. student: George Mason University, Virginia, Dept. of Climate Dynamics.

X. Feng (committee member) Ph.D. student: George Mason University, Virginia, Dept. of Climate Dynamics.

L. Xu (research supervisor) Ph.D. student: George Mason University, Virginia, Dept. of Climate Dynamics.

**Current Support:**

*Investigation of land-atmosphere predictability using a multi-model strategy*

P.I.: Paul A. Dirmeyer (COLA)

Co-Is: Vasubandhu Misra, Zhichang Guo (COLA)

National Oceanic and Atmospheric Administration (NA06OAR4310067)

1 June 2006 - 31 May 2009 (NCE)

*Experimental High Resolution Seasonal Climate and Hydrologic Prediction and Predictability Studies of the Pan-American and South American Monsoons from Intra-Seasonal to Seasonal Scales*

P.I.: Vasubandhu Misra (COLA)

Co-Is: Paul A. Dirmeyer, Mei Zhao (BMRC); Carolina Vera (U. Buenos Aires)  
National Oceanic and Atmospheric Administration (NA07OAR4310221)  
1 August 2007 - 31 July 2010

*Weather and climate analysis of water vapor transport and surface interactions coupling to precipitation processes*

P.I.: Michael G. Bosilovich (NASA/GSFC)

Co-Is: Paul A. Dirmeyer, (COLA), Arlindo Da Silva (GSFC), and Julio Bacmeister (GSFC)

National Aeronautics and Space Administration (NNX09AI84G)

1 June 2009 - 31 May 2013

*Predictability of the Physical Climate System*

P.I.: J. Kinter (COLA)

Co-PIs: T. DelSole, P. Dirmeyer, B. Huang, B. Klinger, V. Krishnamurthy, E. Schneider, J. Shukla, D. Straus (COLA)

National Science Foundation (ATM-0830068), National Oceanic and Atmospheric Administration (NA09OAR4310058), and the National Aeronautics and Space Administration (NNX09AN50G)

1 September 2009 – 31 August 2014

**Previous Support:**

*Predictability of Earth's Climate*

P.I.: J. Shukla (COLA)

Co-PIs: J. Kinter, E. Schneider, P. Schopf, D. Straus, T. DelSole, P. Dirmeyer, B. Huang, and B. Kirtman (COLA)

National Science Foundation (ATM-0332910), National Oceanic and Atmospheric Administration (NA16-OGP2248), and the National Aeronautics and Space Administration (NAG5-11656)

1 January 2004 - 31 December 2008

*Demonstrating the Value of NASA Research Satellite Data, Data Assimilation Products and Models for Improving Seasonal Prediction of Tropical Climate*

P.I.: James L. Kinter III (COLA)

Co-PIs: Paul A. Dirmeyer, Bohua Huang, Ben P. Kirtman, V. Krishnamurthy, Vasubandhu Misra, Paul Schopf, David M. Straus, and Mei Zhao (COLA), Siegfried Schubert (NASA/GSFC), Cort Willmott (University of Delaware), Menas Kafatos (George Mason University)

National Aeronautics and Space Administration (NNG06GB54G)

15 December 2005 - 14 December 2008

*Intergovernmental Personnel Act (IPA) Assignment to the National Science Foundation*

National Science Foundation ATM-06-10629

1 January 2006 – 15 August 2007

*Collaborative Research: Characterizing Land Surface Memory to Advance Climate Prediction*

P.I.: Paul A. Dirmeyer (COLA) {Role of PI was surrendered for NSF IPA in Dec 2005}

Co-PIs: Timothy DelSole (COLA),

Collaborators: Kaye L. Brubaker (U. Maryland College Park), C. Adam Schlosser (MIT)

National Science Foundation EAR-0233320

1 July 2003 - 30 June 2007

*Land Information Systems*

P.I.: Paul R. Houser (NASA/GSFC)

Co-Is: C. Peters-Lidard (Ga. Tech), P. Dirmeyer (COLA), S. Denning (CSU), K. Mitchell (NOAA/NCEP), E. Wood (Princeton), K. Bender (Northwest H.S.), and B. Doty (COLA)

National Aeronautics and Space Administration NAG5-12274

1 March 2002 - 31 May 2005

*Multi-model Investigations of Climate in the Global Land-Atmosphere System*

P.I.: Paul A. Dirmeyer (COLA)

Co-PIs: Paul R. Houser, Randal D. Koster (NASA/GSFC)

National Aeronautics and Space Administration NAG5-11579

1 Feb 2002 - 31 Jan 2005

*Analysis of Atmospheric Water Cycling over the United States*

P.I.: Kaye L. Brubaker (U. Maryland)

Co-I.: Paul A. Dirmeyer (COLA)

National Oceanic and Atmospheric Administration NA96GP0353

1 August 1999 - 31 July 2002

*Coupled High-Resolution Ocean-Land-Atmosphere Simulation of Seasonal-Interannual Climate Variability over Amazonia*

P.I.: Paul A. Dirmeyer (COLA)

Co-Is: Benjamin P. Kirtman (COLA), Charles J. Vörösmarty (U. New Hampshire)

Collaborators: José Marengo (CPTEC, Brazil), Humberto R. da Rocha (U. São Paulo)

National Aeronautics and Space Administration NAG5-8416

15 March 1999 - 14 March 2002

*Predictability and Variability of the Present Climate*

P.I.: J. Shukla (COLA)

Co-PIs: J. Kinter, E. Schneider, P. Schopf, and D. Straus (COLA)

Co-Is: D. DeWitt, P. Dirmeyer, B. Huang, and B. Kirtman (COLA)

National Science Foundation (ATM-9814295), National Oceanic and Atmospheric Administration (NA96GP0056), and the National Aeronautics and Space Administration (NAG5-8202)

1 March 1999 - 29 February 2004

*The Global Soil Wetness Project*

P.I.: Paul A. Dirmeyer (COLA)

Collaborators: Pavel Kabat (Winand Staring Centre, Netherlands)

A. J. Dolman (Winand Staring Centre, Netherlands)

National Aeronautics and Space Administration NAG8-1526

1 April 1998 - 31 March 2001

*Integrating Climate, Hydrologic and Decision-Support Models for Regional Assessments*

P.I.: Paul A. Dirmeyer (COLA)

Co-PIs: James L. Kinter (COLA), Peter P. Rogers (Harvard U.)

National Science Foundation ATM-9712057

1 Sep 1997 - 31 Aug 2001

**Reviewer for the following professional journals:**

Science, Nature, Nature Geosci., Proc. Natl. Acad. Sci., J. Hydrometeor., J. Climate, Mon. Wea. Rev., Bull. Amer. Meteor. Soc, J. Applied Meteor., J. Geophys. Res., Water Resour. Res., Geophys. Res. Lett., J. Hydrology, J. Meteor. Soc. of Japan, Atmosphere-Ocean, Climate Dynamics, Int. J. Climatol., Global and Planetary Change, Meteor. Atmos. Phys., Theoret. and Appl. Climatol., Intl. Journal of Applied Earth Observation and Geoinformation, and Global Change Biology.

**Reviewer for the following programs:**

National Research Council (Committee to Review the GAPP Science and Implementation Plan), NOAA Global Change Program, CPPA, PACS, GCIP, GAPP and GOALS programs; the National Science Foundation; NASA Earth Science Enterprise, Mission to Planet Earth, Land-Surface Hydrology, Global Water and Energy Cycle, Energy and Water System (NEWS), Earth Science Scholar, Earth Observing System, and Seasonal-Interannual Prediction Project; the NCAR Scientific Computing Division; the Intergovernmental Panel on Climate Change.

**Editor:**

Journal for Advances in Modeling Earth Systems (2008-)

**Guest Editor:**

International Journal of Climatology (2008-2010), Journal of the Meteorological Society of Japan (1999).

**Professional Organizations:**

American Meteorological Society (AMS; 1985-present).

American Geophysical Union (AGU; 1990-present).

**Awards:**

U. Maryland Dept. of Atmospheric and Oceanic Science Distinguished Alumnus, 2009

AMS Clarence Leroy Meisinger Award, 2006

NASA Software of the Year Award, 2005 (Land Information System (LIS) v. 4.0)

ISLSCP Award of Appreciation for work on the ISLSCP Initiative II Data Project, 2005.

ISLSCP Award of Appreciation for work as chairman of the Global Soil Wetness Project, 1996.

Meteorology Department: Global Change Essay Award for paper entitled, "Overview of global climate change: Causes and effects." 1990.

Graduate Studies and Research: Graduate Fellowships; 1986/87, 1987/88 and 1988/89.

University of Maryland, Graduate Studies and Research: Conference Travel Award, 1989.

College of Geosciences, Texas A&M University: Outstanding Student Award, 1986.

Phi Kappa Phi, 1986.

**Hobbies:**

Woodworking, carpentry, gardening/landscaping, music, photography, videography,  
graphic design