

CONSTANCE MARIA BROWN (MITIC)

Assistant Professor
Atmospheric Science Program, Department of Geography
Indiana University Bloomington
701 E. Kirkwood Avenue, Bloomington, Indiana, 47405-7100, USA

EDUCATION

- Ph.D. McGill University, Montreal, Canada, 1999. Natural Resource Sciences
Thesis: *Flux associations and their relationship to the underlying heterogeneous surface characteristics*. An investigation into the space-time coupling of surface heat, moisture, vegetation and atmospheric conditions. Spatial and statistical analyses utilizing both GIS and personalized programs.
Advisor: Professor Peter Schuepp
- M.Sc. McGill University, Montreal, Canada, 1994. Natural Resource Sciences.
Thesis: *Spatial distribution and co-occurrence of surface-atmosphere exchange processes*. An investigation into the relationship between the conditions of agricultural crops in the San Joaquin valley to carbon, water and ozone fluxes. Spatial and statistical analyses utilizing both GIS and personalized programs.
Advisor: Professor Peter Schuepp
- B.A (Hons.) University of Windsor, Windsor, Ontario, Canada, 1991. Geography & Resource Management
Thesis: *The impact of CO₂-induced climate change on corn yields in the Essex county region*.
Advisor: Professor Alain Viau
- Diploma University of Technology, Kingston, Jamaica, 1984. Urban Planning
Senior Project: *Redesign and development of a shanty town*.

PROFESSIONAL EXPERIENCE

- 2004-Present **Assistant Professor**, Geography Department, Indiana University, Bloomington, Indiana. *Develop and implement independent field research program, teach undergraduate and graduate courses, mentor and supervise undergraduate and graduate students and perform service activities such as sitting on faculty council committee, organize and chair sessions at national and international conferences.*
- 2001-2004 **Site Manager**, Global Energy and Water Cycle Experiment (GEWEX) - Coordinated Enhanced Observational Period (CEOP) semi-arid reference site, University of Arizona, Tucson, Arizona. *Co-ordinate data acquisition, analysis and delivery.*
- 1999-2004 **Senior Post Doctoral Research Associate**, Department of Hydrology and Water Resources, NSF Science and Technology Centre (SAHRA), University of Arizona, Tucson, Arizona. *Coordinate administrative and research activities within SAHRA related to Environmental water balance above the mountain Front. This involved implementation of executive committee activities, annual reporting for the National Science Foundation, compiling budgets for focus area of responsibility, coordination of research activities and plans for multiple groups from multiple institutions. Supervise students, and research staff, Co-teach graduate course. Plan, coordinate and implement field experiments, including a new 30 m eddy covariance micrometeorological tower and a network of four micrometeorological stations, sited on the Mt Bigelow sky-island in the US Southwest, for studies related to the atmospheric, surface and sub-surface seasonal cycles of water and carbon dioxide exchange to the growth, development and function of a sky island sub-alpine forest, vegetation response to environmental stress and the sustainability of semi-arid water*

resources. Examine ecosystem-atmosphere interactions from micrometeorological data collected by both tall micrometeorological flux towers from a variety of locations and low flying research aircraft.

- 2000-2004 **Research Scientist**, Graduate Inter-disciplinary Program, Global Change Division, University of Arizona, Tucson, Arizona.
- 1999-2001 **Co-Investigator**, Mackenzie GEWEX Study (MAGS), McGill University, Canada/University of Arizona, Tucson, Arizona. *The use of the National Research Council of Canada Twin Otter Research Aircraft to provide measurements of radiometric surface properties and surface-atmosphere exchange of sensible and latent heat and Carbon Dioxide (CO₂) fluxes at temporal and spatial scales suitable for testing models based on remote sensing and numerical simulation. Analysis of surface radiation balances, surface-atmosphere fluxes and energy partitioning (between sensible and latent heat fluxes) during and after snow-melt, at representative sampling sites for the Northern Mackenzie Basin.*
- 1999 **Post-Doctoral Researcher**, University of McGill, Canada.
- 1997-1999 **Graduate Research Assistant**, McGill University, Canada.
- 1995 **Research Associate**, Colorado State University/USDA Rocky Mountain Forest Service, U.S.A. Analysis of surface and atmosphere data collected during the California Ozone Deposition Experiment in the San Joaquin Valley, CA.

HONOURS & AWARDS

- 2005 Instructional Development Grant, Instructional Support Services Active Learning Grant Program, Indiana University. *Development for Research Based Learning in Environmental Change. (\$1500)*
- 1997 Post Graduate Fellowship, Centre for Climate and Global Change Research, *McGill University*.
- 1995 Research Fellowship, California State Air Resources Board.
- 1993-1997 Eco Research Post Graduate Fellowship, Natural Sciences and Engineering Research Council of Canada.
- 1993 Student Award (2nd), 16th Canadian Symposium on Remote Sensing.
- 1992 Post Graduate Scholarship in Forest Meteorology, Environment Canada.
- 1991-1993 Post Graduate Fellowship, Natural Sciences and Engineering Research Council of Canada.
- 1991 Governor General Silver Medal, *University of Windsor*
- 1991 Board of Governors Bronze Medal, *University of Windsor*
- 1991 Undergraduate Award, Canadian Association of Geographers, *University of Windsor*
- 1990 Scholarship in Geography, Andrew Douglas Bowlby, *University of Windsor*
- 1990 Scholarship for Academic Excellence, *University of Windsor*
- 1989 Scholarship for Academic Excellence, *University of Windsor*

RESEARCH GRANTS

Principal Investigator

- Pending National Sciences Foundation, Collaborative Research - Coupling Mountain Island Forests Dynamics and Seasonal Water Availability in South western U.S.A. (\$433,610)
- 2006 Indiana University Alliances for Graduate Education in the Professoriate (AGEP) Grant for the Recruitment of underrepresented minority graduate students for the Geography Department. (\$3000)
- 2006 Office of Academic Support and Diversity, Minority Building Travel Grant (\$1000)
- 2005 Instructional Development Grant, Instructional Support Services Active Learning Grant Program, Indiana University. *Development for Research Based Learning in Environmental Change. (\$1500)*

(Co-)Principal Investigator

- 2005-2006 Indiana University, Commitment to Excellence (CTE) program in Interdisciplinary Environmental Sciences. *Installation of a network of environmentally critical monitoring sites within the Griffy*

Woods Research and Teaching Preserve (GWRTP) linked by telecommunication equipment for continuous data access. (Co-PI) (\$54,110). IU Research and Teaching Preserve Desmond Estate Endowment (\$61,000).

Senior Personnel

2004-2006 National Science Foundation Award # 0352988 (Atmospheric Sciences). Observations and Modeling of Orographic Cumulus Development Using Digital Imaging and Data Cataloguing. P.I. Joseph Zehnder, Arizona State University. (\$638,412)

TRAVEL AWARDS /SUPPORT

2003 GEWEX-CEOP, CEOP Reference Site Managers Workshop, Max Planck Society, Berlin, Germany
2003 University of Arizona Faculty Foreign Travel Award, Japan, *XXIII General Assembly of the IUGG*

PUBLICATIONS

Refereed Journals & Collections

In Preparation

Brown-Mitic, C.M., J.A. Zehnder, Flow fields on and around a semi-arid Sky Island.

Brown-Mitic, C.M., Southwestern Sky Island Forest in an Atmosphere of Changing Climate.

Published

Brown-Mitic, C.M., W.J. Shuttleworth, C. Harlow, J. Petti, E. Burke, R. Bales, 2007. Seasonal Water Dynamics Of A Sky Island, Subalpine Forest In Semi-Arid Southwestern United States, *Journal of Arid Environments*, 69 (2), 49-70.

Lawford R., M. Bosilovich, S. Eden, S. Benedict, **C. Brown**, A. Gruber, P. Houser, K. Hsu, J. Huang, W. Lau, T. Meyers, K. Mitchell, C. Peters-Lidard, J. Roads, M. Rodell, S. Sorooshian, D. Tarpley, S. Williams, 2006. US Contributions to the CEOP, *Bulletin of the American Meteorological Society*, 87 (7), 927-939.

Zehnder, J.A., L. Zhang, D. Hansford, A. Radzan, N. Selover, **C.M. Brown**, 2006. Using Digital Cloud Photogrammetry to Characterize the Onset and Transition from Shallow to Deep Convection Over Orography, *Monthly Weather Review*, 134, 2527-2546.

Harlow, R.C., E.J. Burke, R.L. Scott, W.J. Shuttleworth, **C.M. Brown**, J.R. Petti, 2004. Derivation of temperature lapse rates in semi-arid southeastern Arizona, *Hydrology and Earth System Sciences*, 8(6), 1179-1185.

Wang, X-P, **C.M. Brown-Mitic**, E-S. Kang, J-G. Zhang, L. Xin-Rong, 2004. Evapotranspiration of *Caragana korshinskii* communities in a revegetated desert area: Tengger Desert China, *Hydrological Processes*, 18 (17), 3293-3303.

Brown-Mitic, C.M., W.J. Shuttleworth, E. Burke, J. Petti, S. Sorooshian, 2004. Water and carbon exchange at the Mt. Bigelow reference site, R. Schiffer, C.R. Mechoso, P.D. Try (eds.) *CEOP Newsletter No. 5, pp. 8, January 2004*.

Brown-Mitic, C.M., S. Kaharabata, R. Bales, 2002. Priority parameters and their measurements, in atmospheric monitoring, Hilary I. Inyang (ed.), in *Encyclopaedia of Life Support Systems (EOLSS)*, Developed under the Auspices of the UNESCO, EOLSS Publisher, Oxford, UK, <http://www.eolss.net/>.

Brown-Mitic, C.M., J.I. MacPherson, P.H. Schuepp, B. Nagarajan, P.M.K. Yau, R. Bales, 2001. Aircraft observations of surface-atmosphere exchange during and after snowmelt for different arctic environments: MAGS 1999, *Hydrological Processes*, 15(18), 3585-3602.

Brown-Mitic, C.M., J.I. MacPherson, P.H. Schuepp, R. Bales, 2001. Surface-atmosphere exchange during and after snow melt for different arctic environments: MAGS, *Proceedings of the 58th Annual Eastern Snow Conference, May 17-19, 2001. Ottawa, Canada, 273-282*

- Mitic, C.M.**, W.J. Massman, P.H. Schuepp, J.L. Collette (Jr), 1999. Structural analysis and flux associations of CO₂, H₂O, heat and ozone over cotton and grape canopies, *Atmospheric Environment*, 33, 1159-1173.
- Mitic, C.M.**, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson, 1997. Flux association in coherent structures transporting CO₂, H₂O, heat and ozone over the CODE grid site, *Agri. and Forest Met.*, 87, 27-39.
- Mitic, C.M.**, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson, 1995. Spatial distribution and co-occurrence of surface - atmosphere energy and gas exchange processes over the CODE grid site, *Atmospheric Environment*, 29(21), 3169-3180.
- Mitic, C.M.**, A. Viau, 1993. Evaluation de l'impact d'un changement climatique sur les besoins en irrigation et les taux de rendements au champ du maïs dans le sud-ouest de l'Ontario. *Le Climat*, 11(1), (25pp).
- Viau, A., **C.M. Mitic**, 1992. Potential impacts of CO₂-induced climate change using the GISS, GFDL AND CCC scenarios on corn yields in the Essex county region of Ontario, *Climatological Bulletin*, 26(2), 79-105.

Conference Proceedings, Research Reports

- Schuepp P.H., J.I. MacPherson, C. Brown-Mitic, B. Nagarajan, P.M.K. Yau, 2000. Airborne observations of surface-atmosphere energy exchange over the northern Mackenzie basin. Final Report, Mackenzie GEWEX Study (MAGS).
- Mitic, C.M.**, S. Ogunjemiyo, R. Pelletier, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson, 1995. Challenges of airborne observations of biosphere-atmosphere energy and trace gas exchange over heterogeneous surfaces, Proceedings of the *International Symposium on Environment and Biometeorology, July 20-22, Beijing, China*, 302-310.
- Mitic, C.M.**, R. Pelletier, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson, 1994. Trace gas and energy exchange over heterogeneous surfaces: The CODE site as a natural laboratory, *21st Conference on Agricultural and Forest Meteorology and 11th Conference on Biometeorology and Aerobiology, Amer. Meteorological Society, March 7-11, San Diego, California*, 393-396.
- Mitic, C.M.**, P.H. Schuepp, P.H. Caramori, R.L. Desjardins, J.I. MacPherson, 1993: The role of airborne and satellite-based remote sensing in the interpretation of energy and gas exchange over heterogeneous surfaces, Conference Proceedings of the *16th Canadian Symposium on Remote Sensing, June 8-11, Sherbrooke Quebec*. 915-920.
- Schuepp, P.H., Y. Gua, P.H. Caramori, **C.M. Mitic**, 1993. Effects of surface distribution of temperature and wetness on earth-atmosphere exchange of heat and moisture. Conference Proceedings on *Hydroclimatology, Amer. Meteorol. Soc., Anaheim, Ca, Jan. 17-22*, 5-8.

INVITED PRESENTATIONS

- Keynote Speaker: "Yesterday, Today and Tomorrow: Women in Science". Women in Science Annual Research Day, Indiana University, Bloomington, Indiana, March 9, 2006
- Environmental changes and the use of satellite images: St Georges Episcopal School, January, 2006
- Ecosystems of the US Semi Arid Southwest: Function and Response to Natural and Human Induced Variability Department of Geography, Indiana University, Indiana, December, 2004.
- Surface-atmosphere exchange in agriculture, arctic, boreal and southwestern mountain island forest ecosystems, Department of Environmental Studies, Florida International University, Florida. March 2004.
- Energy and carbon exchange in southwestern mountain island forests, Department of Geography, Indiana University, Indiana, February, 2004.
- Space-time characteristics of surface fluxes: An investigation over agricultural, forest and arctic ecosystems. Department of Atmospheric Sciences, Purdue University, Indiana, U.S.A., May 2003.
- SAHRA Mt. Bigelow eddy covariance flux tower: CEOP reference site. CEOP 2nd International Implementation Planning Meeting, MPI and FREE University, Berlin, Germany, 2 - 4 April, 2003. <http://monsoon.t.u-tokyo.ac.jp/ceop/meeting.html>
- SAHRA Mt. Bigelow eddy covariance flux tower: CEOP reference site. CEOP Reference Site Managers Workshop, Max Planck Society, Berlin, Germany, 31 March - 1 April, 2003. <http://monsoon.t.u->

tokyo.ac.jp/ceop/meeting.html

Advances and contributions of low flying aircraft observation to the field of land surface climatology. Department of Atmospheric Sciences, University of Arizona, 02/2000.

Applications of a Geographic Information System. McGill University, Montreal, Canada, 12/1994.

Fundamentals of a Geographic Information System. McGill University, Montreal, Canada, 11/1993.

CONFERENCE PRESENTATIONS

Papers Presented

Brown-Mitic, C.M., H. Gupta. Sustainability and Vulnerability of Sky Island Forest in an Atmosphere of Changing Climate, Annual Meeting of the European Geophysical Union, Vienna, Austria, April 02-07, 2006.

Brown-Mitic, C.M., R. Scott, T. Myers. Hydro-micrometeorological relationships across mountain island forest, grassland and riparian ecosystems of a semi-arid basin, Annual Meeting of the European Geophysical Union, Vienna, Austria, April 24-29, 2005.

Brown-Mitic, C.M., R. Scott, T. Myers. Carbon-water dynamics of semi-arid ecosystems, Annual Meeting of the Association of American Geographers, Denver, Co., April 5-9, 2005.

Brown-Mitic, C.M., E. Burke, W.J., Shuttleworth, J. Petti, R.C. Harlow, P.D. Brooks. Assimilation of remotely sensed data into the Biome-BGC ecosystem model to improve the prediction of energy and carbon exchange in southwestern mountain island forests, *AGU Fall Meeting, San Francisco, California, December 8-12, 2003.*

Brown-Mitic, C.M., N. Molotch, B. Wolverly, R. Bales, R. Brice, M. Hutterli. Spatial energy balance snowmelt modelling of the Echaurren and Tokopah watersheds, *XXIII General Assembly of the IUGG, Sapporo, Japan, June 30-July 11, 2003.*

Brown-Mitic, C.M., W.J. Shuttleworth, R.C. Harlow, R. Bales, J. Petti, E. Burke. Characterizing water, energy and CO₂ exchange for a sky island subalpine forest in the southwestern USA, *EGS-AGU Joint Assembly, Nice, France, April 06-11, 2003.*

Harlow, R.C., **C.M. Brown-Mitic**, E. Burke, W.J. Shuttleworth, R. Bales, J. Petti. Spatial variability's in sky island subalpine hydro/micrometeorology, *EGS-AGU Joint Assembly, Nice, France, April 06-11, 2003.*

Harlow, R.C., K. Blasch, **C.M. Brown**, J.R. Petti, W.J. Shuttleworth, T. Ferre, E.J. Burke. Determination of infiltration for a semi-arid sky island, *AGU Fall Meeting, San Francisco, California, December 6-10, 2002.*

Harlow, R.C., **C.M. Brown**, L. Bastidas, W.J. Shuttleworth, R. Bales. Multi-objective calibration of the NOAA and CLM land surface schemes for Mt. Bigelow, a semi-arid sky island, *2nd SAHRA Annual Meeting, Tucson, Arizona, February 25-March 01, 2002.*

Brown, C.M., R.C. Harlow, W.J. Shuttleworth, R. Bales. Subalpine hydrometeorology: Implications for snowmelt, energy balance and scaling issues, *2nd SAHRA Annual Meeting, Tucson, Arizona, February 25-March 01, 2000.*

Brown-Mitic, C.M., J.I. MacPherson, P.H. Schuepp, R. Bales. Surface-atmosphere exchange of energy and CO₂ fluxes during and after snow melt observed by low-flying Twin Otter aircraft: MAGS 1999, *4th International GEWEX Conference, Paris, France, September 10-14, 2001.*

Brown, C.M., R. Bales. Dynamics of energy balance, vegetation and snowmelt: Implications for alpine/subalpine water balance, *1st SAHRA Annual Meeting, Tucson, Arizona, February 20-23, 2001.*

Schuepp, P.H., J.I. MacPherson, **C.M. Brown-Mitic**, B. Nagarajan, P.M.K. Yau. Airborne Observations of surface-atmosphere energy exchange over the northern Mackenzie basin, *6th Scientific Workshop for the Mackenzie GEWEX Study (MAGS), Saskatoon, Saskatchewan, Canada. November 15 – 17, 2000.*

Brown-Mitic, C.M., P. Schuepp, J.I. MacPherson, S., Ogunjemiyo, N., Newman, R. Bales. The Dynamics of the surface-Atmosphere exchange during and after snow melt for different Arctic ecosystems: MAGS, *24th Conference on Agricultural and Forest Meteorology, Amer. Meteorological Society, Davis, California, Aug. 14-18, 2000.*

- Schuepp, P.H., J.I. MacPherson, S. Ogunjemiyo, B. Nagarajan, **C.M. Brown-Mitic**, N. Neumann, P.M.K. Yau. Analysis and interpretation of airborne flux observations in MAGS, *34th Ann. Congress of the Canadian Meteorological and Oceanographic Society, Victoria, British Columbia, Canada, May 29 - June 1, 2000.*
- Schuepp, P.H., J.I. MacPherson, R.L. Desjardins, S., Ogunjemiyo, **C.M. Brown-Mitic**. Interpretation and scaling up of airborne observations of biosphere-atmosphere exchange, based on radiometric remote sensing and local climate models, *Intl. Congress of Biometeorology, Sydney, Australia, Nov. 8-12, 1999.*
- Brown-Mitic, C.M.**, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson. A spatial model for predicting the distribution and intensity of the sources and sinks for heat, CO₂ and water vapour from BOREAS, *23rd Conference on Agricultural and Forest Meteorology, Amer. Meteorological Society, Albuquerque, New Mexico, Nov. 2-6, 1998.*
- Schuepp, P.H., S. Ogunjemiyo, R.L. Desjardins, J.I. MacPherson, **C.M. Mitic**. Analysis and interpretation of airborne flux observations in the surface boundary layer over heterogeneous terrain, *12th Symposium on Boundary Layers and Turbulence, Vancouver, B.C., Canada, July 28-August 1, 1997.*
- Mitic, C.M.**, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson. Atmosphere-surface coupling over the boreal forest determined from aircraft-based flux relationships and surface conditions during BOREAS 1994, *31st Congress of Canadian Meteorology and Oceanographic Society, Saskatoon, Saskatchewan, Canada, June 1-5, 1997.*
- Mitic, C.M.**, W.J. Massman, P.H. Schuepp. Time-series analysis of structures transporting heat, moisture, CO₂ and ozone during stable and unstable conditions over California agricultural lands, *30th Congress of Canadian Meteorology and Oceanographic Society, Toronto, Ontario, Canada, May 27-3, 1996.*
- Mitic, C.M.**, S. Ogunjemiyo, R. Pelletier, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson. Challenges of airborne observations of biosphere-atmosphere energy and trace gas exchange over heterogeneous surfaces, *International Symposium on Environment and Biometeorology, Beijing, China, July 20-22, 1995.*
- Ogunjemiyo, S., P.H. Schuepp, **C.M. Mitic**, R.L. Desjardins, J.I. MacPherson. On determination of surface source and sink distribution of energy and gases from airborne observation in BOREAS, *29th Annual Congress of Canadian Meteorology and Oceanographic Society, Kelowna, British Columbia, Canada, May 29 - June 2, 1995.*
- Mitic, C.M.**, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson. Flux patterns and coincidence of turbulent structures in regional energy and gas exchange over agricultural areas, *28th Congress of Canadian Meteorology and Oceanographic Society, Ottawa, Ontario, Canada, May 30 - June 3, 1994.*
- Mitic, C.M.**, R. Pelletier, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson. Trace gas and energy exchange over heterogeneous surfaces: The CODE site as a natural laboratory, *21st Conference on Agricultural and Forest Meteorology and 11th Conference on Biometeorology and Aerobiology, Amer. Meteorological Society, San Diego, California, March 7-11, 1994.*
- Mitic, C.M.**, P.H. Schuepp, R.L. Desjardins, J.I. MacPherson. Spatial distribution of ozone uptake as a function of land use and energy exchange characteristics, *International Conference on Regional Photochemical Measurements and Modelling Studies, Amer. Meteorological Society, and Amer. Geophysical Union, La Jolla, California, Nov. 8-12, 1993.*
- Mitic, C.M.**, P.H. Schuepp, P.H. Caramori, Y. Gua, R.L. Desjardins, J.I. MacPherson. Ozone uptake in relation to the surface exchange of moisture and CO₂, *13th International Congress of Biometeorology, Calgary, Alberta, Canada, Sept. 12-18, 1993.*
- Mitic, C.M.**, P.H. Schuepp, P.H. Caramori, R.L. Desjardins, J.I. MacPherson. The role of airborne and satellite-based remote sensing in the interpretation of energy and gas exchange over heterogeneous surfaces, *16th Canadian Symposium on Remote Sensing, Sherbrooke, Quebec, Canada, June 8-11, 1993.*
- Schuepp, P.H., Y. Gua, P.H. Caramori, **C.M. Mitic**. Effects of surface distribution of temperature and wetness on earth-atmosphere exchange of heat and moisture. *Hydroclimatology, Amer. Meteorol. Soc., Anaheim, California, Jan. 17-22, 1993.*
- Mitic, C.M.** and A.A. Viau. Potential impacts of CO₂-induced climate change using the GISS, GFDL and CCC scenarios on corn yields in the Essex County region of Ontario, *26th Annual Congress of the Canadian*

WORKSHOPS/PROJECT ATTENDANCE

Caribbean Climate Conference (C3), Montego Bay, Jamaica, April 10-12, 2006
SAHRA 6th Annual Meeting, Phoenix, Arizona, Oct. 11-13, 2006. <http://www.sahra.arizona.edu/>
AmeriFlux Annual Meeting, Boulder, Colorado, Oct 16-18, 2006
SAHRA 5th Annual Meeting, Tucson, Arizona, Oct. 26–29, 2005. <http://www.sahra.arizona.edu/>
CuPIDO, Cumulus Photogrammetric, In-Situ and Doppler Observations Planning Workshop, April 11, 2005.
CEOP 2nd International Implementation Planning Meeting, MPI and FREE University, Berlin, Germany, 2 - 4 April, 2003. <http://monsoon.t.u-tokyo.ac.jp/ceop/meeting.html>
CEOP 2nd International Implementation Planning Meeting, MPI and FREE University, Berlin, Germany, 2 - 4 April, 2003. <http://monsoon.t.u-tokyo.ac.jp/ceop/meeting.html>
CEOP Reference Site Managers Workshop, Max Planck Society, Berlin, Germany, 31 March - 1 April, 2003. <http://monsoon.t.u-tokyo.ac.jp/ceop/meeting.html>
SAHRA Workshop, Rio Grande Research, Taos, New Mexico, June 6-7, 2002. <http://www.sahra.arizona.edu/events/workshops/taos/index.html>
AmeriFlux Workshop, Standardization of Flux Diagnostics and Analysis Guidelines, Corvallis, Oregon August 27-30, 2002. <http://public.ornl.gov/ameriflux/resource-workshops.shtml>
AmeriFlux Workshop, Corrections to Eddy Covariance Flux Estimates, Boulder, Colorado May 30-31, 2000. <http://public.ornl.gov/ameriflux/resource-workshops.shtml>

TEACHING ACTIVITIES [enrollment]

2004- *Assistant Professor, Indiana University*
Spring 2007 G109 Weather and Climate [180]
G451 & G551 [8] Water Resources: Semi-Arid Environments

Fall 2006 G109 Weather and Climate [180] <http://www.indiana.edu/~geog109/>
G305 Environmental Change [5] <http://www.indiana.edu/~g305/>

Spring 2006 G109 Weather and Climate [180]

Fall 2005 G109 Weather and Climate [180]
G305 Environmental Change [27]

Spring 2005 G109 Weather and Climate [180]
G440 & G540 Topics in Environmental Geography [7] Semi-Arid Hydro-Micrometeorology: A Delicate Balance or System Overload? http://mypage.iu.edu/~combrown/course_detail.htm

Fall 2004 G109 Weather and Climate [60]

Spring 2002 *Co-Instructor*, H696Q [10] Advanced Topics in Hydrometeorology and Hydroclimatology. Department of Hydrology and Water Resources, University of Arizona.

1996-1997 Teaching Assistant, McGill University, Canada.
1989-1991 Teaching Assistant, University of Windsor, Canada

STUDENT SUPERVISION: Thesis Supervisor (*), Committee Member (), Project Supervisor(***)**

Indiana University

- Keshab Parajuli (*) *MS. Geography/Atmospheric Sciences 2006-*
Jessica Howe (**) *MS. Geography/Atmospheric Sciences 2006-*
Bin Deng (**) *MS. Geography/Atmospheric Sciences 2006*
- Maria Gaetani (***) *BSES Senior Project 2005- Eco-Meteorology of Forest Fires in the US Southwest*
Sarah Bielski (***) *Hutton Honours College Summer Research: WAYE (Weather and Your Environment)*
NBC TV station in Louisville, Kentucky
- Keshab Parajuli (***) *Instrumentation Project 2006*
Bin Deng (***) *Instrumentation Project 2005*
Kyle Ponsler (***) *Instrumentation Project 2005*
Inter-comparison and calibration of 4-Way radiometer and a suite of net radiometers

University of Arizona

- Ph.D. Hydrology and Water Resources*
R. Chawn Harlow (**) 2000-2003. Title: Remote and In Situ Measurements of Soil and Vegetation Water Content
Research Specialist 2000-2004
Jonathan Petti

SERVICE

Professional Activities

Conference/Seminar Sessions Organized /Chaired/Judged

- 2007 *Presentation Judge: Women in Science Program Annual Research Day, Indiana University, Bloomington, Indiana, March 5, 2007*
- 2006 *Presentation Judge: Women in Science Program Annual Research Day, Indiana University, Bloomington, Indiana, March 5, 2007*
- 2006 *Keynote Speaker: Women in Science Program Annual Research Day, Indiana University, Bloomington, Indiana, March 9, 2006*
- 2006 *Finalist Judge: Indiana Junior Academy of Science Competition*
- 2006 *Chair: Geography Department minority recruitment committee. Supervised four graduate students, research, attend, give seminars and recruit potential students at two graduate fairs and two university campuses. Establish recruitment network with historically black university and facilitate professional seminar and campus visits for several minority students.*
- 2005 *Presentation Judge: Women in Science Program Annual Research Day, Indiana University, Bloomington, Indiana, March 2, 2005*
- 2005 *Organizer: Oral session on Landsurface-Atmosphere Interactions, Association of American Geographers Annual Conference, Denver, Colorado, April 2005.*
- 2005 *Co-Organizer: Oral session on Landsurface-Atmosphere Interactions and Urban Climate, Association of American Geographers Annual Conference, Denver, Colorado, April 2005*
- 2005 *Chair: Association of American Geographers Annual Conference, Denver, Colorado, April 2005. Landsurface-Atmosphere Interactions I*
- 2005 *Chair: Association of American Geographers Annual Conference, Denver, Colorado, April 2005. Landsurface-Atmosphere Interactions II and Urban Climate I*
- 2003 *Co-Chair: American Geophysical Union, San Francisco, December 2003. Estimating Terrestrial Carbon, Water, and Energy Fluxes from Site to Region II.*
- 2000 *Co-Coordinator: Global Biogeochemical Cycles: Science and Policy Issues seminar series, Institute for the Study of Planet Earth (ISPE), University of Arizona.*

Committee Member and Participant

2007 Indiana Graduate School Selection Committee for Minority Graduate Fellowships
2006 Indiana University Selection Committee for Faculty Active Learning Grants
2006- Indiana University AGEP Student Mentor
2006- Indiana University Geography Department Recruitment Committee Chair
2006- Indiana University Neal-Marshall Black Culture Center Advisory Board
2005, 2006- Bloomington Faculty Council Research Affairs Committee
2001, 2002 Research Integration Committee, SAHRA, University of Arizona
1995-1997 Remote Sensing Committee, American Geophysical Union.

Journal Refereed

Hydrological Processes, 2003
Global Change Biology, 2006
Journal of Applied Meteorology, 2004
Journal of Arid Environment, 2005, 2006
CATENA, 2005

Research and Book Proposals Reviewed

Thomson - Brooks/Cole: Detailed Text Book Review. Meteorology Today, Donald Ahrens, Eight Edition. 2007
Springer Environmental Sciences Book Proposal: Climate and Global Changes. 2006
U.S National Science Foundation (NSF), 2005
Canadian Foundation for Climate and Atmospheric Sciences (CFCAS). Invited to review. 2005

News Related Featured Research

“How trees manage water in arid environments”
Indiana University Media Relations Top Stories, *January 2, 2007*
<http://newsinfo.iu.edu/news/page/normal/4163.html>
National Science Foundation, *January 3, 2007*
http://www.nsf.gov/news/other_news.jsp
Physorg, *January 3, 2007*
<http://www.physorg.com/news87053606.html>
Arizona Republic, *January 7, 2007 Weekend Edition*
Phoenix, Arizona
National Public Radio, *week of January 9, 2007 Morning Edition*

Membership

American Meteorological Society (AMS)
American Geophysical Union (AGU)
Association of American Geographers (AAG)
Canadian Oceanographic and Meteorological Society (CMOS)
European Geophysical Union (EGU)
International Association of Hydrological Sciences (IAHS)

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