

Christine Susan Betham Grimmond

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EDUCATION

- Ph.D. University of British Columbia, Vancouver, BC, Canada, 1984-88. Conferred - 1989.
Atmospheric Science Programme, Physical Geography (Climatology & Hydrology)
An evapotranspiration-interception model for urban areas.
- M.Sc. University of British Columbia, Vancouver, BC, Canada, 1981-83. Conferred - 1984.
Physical Geography (Climatology & Hydrology)
The suburban water balance: Daily, monthly & annual results from Vancouver, Canada.
- B.Sc (Hons.) University of Otago, Dunedin, New Zealand 1976-78, 1980. Physical Geography
B.Sc. 1978 Paper: *Streamflow source areas of the Owaka Catchment.*
B.Sc. (Hons) 1980 Dissertation: *Runoff from seasonal snow in the Fraser Catchment, Central Otago.*

EMPLOYMENT

- 1/8/2013- Professor of Atmospheric & Oceanic Sciences, Department of Meteorology, University of Reading, Reading, UK
- 2006-13 Professor & Chair of Physical Geography, Environmental Monitoring & Modelling Group, Geography, King's College London, University of London, London, UK
- 2007-13 Adjunct Professor of Geography (Atmospheric Science Program), Indiana U, Bloomington, IN, USA
- 2001-06 Professor of Geography (Atmospheric Science Program), Indiana University, Bloomington, Indiana
- 2000-06 Affiliated Faculty, Russian & East European Institute, Indiana University
- 1997-06 Adjunct (Associate) Professor, School of Public Environmental Affairs, Indiana University
- 1995-01 Associate Professor of Geography (Atmospheric Science Program), Indiana University
- 1989-95 Assistant Professor of Geography (Climate & Meteorology Program), Indiana University
- 1981-88 Teaching Assistant & Research Assistant, Geography, U British Columbia, Vancouver, BC, Canada
- 1980-81 Demonstrator & RA, Geography & Business Development Centre, U Otago, New Zealand
- 1978-79 Hydrologist, Otago Catchment Board, New Zealand
- 1977-78 Field Hydrology Assistant, Otago Catchment Board, New Zealand

ELECTION TO LEARNED SOCIETIES

- 2006 Fellow American Meteorological Society (AMS)

AWARDS, HONORS & DISTINCTIONS

- 2012 Ernest Frolich Fellowship, CSIRO Marine and Atmospheric Sciences, Australia
- 2009 Luke Howard Award, International Association for Urban Climate (Awarded 2010)
- 2009 Japan Society for Promotion of Science Invitation Fellowship for Research in Japan (short-term) (Institute of Industrial Science, University of Tokyo)
- 2009 Helmut E Landsberg Award, American Meteorological Society
Citation: 'For numerous important contributions that have greatly advanced urban meteorology & urban climate sciences, & for sustained & effective leadership that has energized the urban climate research community'
- 2008 Universitatis Lodzianis Amico Medal, University of Łódź, Poland
- 2007 Eminent Professor Visit Award, Dept Civil Engineering, Monash University, Australia
- 2006 *Doctor of Science Honoris Causa*, Göteborg University, Sweden
- 2002 Indiana University Trustees Teaching Award
- 1997 Indiana University Teaching Excellence Recognition Award
- 1994 Indiana University Outstanding Junior Faculty Award
- 1993 Indiana University Summer Faculty Fellowship (COAS)
- 1990 Indiana University Summer Faculty Fellowship (RUGS)
- 1985-87 University of British Columbia Graduate Fellowship
- 1982 University of British Columbia Walter W. Jeffery Memorial Scholarship for Interdisciplinary Hydrology

RESEARCH INTERESTS

- Micrometeorology & hydroclimatology of heterogeneous terrain, especially urban areas
- Measurement & modeling of energy & mass (water & carbon dioxide) exchanges in areas of heterogeneous terrain (cities, forests & wetlands)
- Roughness, heat storage, evaporation, boundary layer growth, surface-atmosphere modeling, surface characterization

CURRENT POSITIONS IN PROFESSIONAL ORGANIZATIONS

2013-	World Meteorological Organization, Chair of the Expert Team on Megacity Implementation Plan
2013-15	University of Aveiro, Portugal, External Expert, CLICURB - Urban Atmospheric Quality, Climate Change and Resilience
2013-	International Association for Urban Climate, Luke Howard Awards Committee
2013-14	China Meteorological Administration - Shanghai Meteorological Service, Special Expert
2013-16	American Meteorological Society Fellows Committee
2012-	Korean Meteorological Administration, International Scientific Board of WISE (Weather Information System Engine)
2012-	<i>Urban Climate</i> , Editorial Board
2012-14	<i>Journal of Atmospheric and Oceanic Technology</i> , Editor
2011-	Steering committee, NEON Urban Ecology Working Group, USA
2011-	Shanghai International Meteorological Advisory Committee, World Meteorological Organisation
2011-12	German Excellence Initiative, <i>Deutsche Forschungsgemeinschaft</i> (German Research Foundation, DFG) and the <i>Wissenschaftsrat</i> (Council for Science and Humanities) Institutional Strategies Review Panel
2011	Research Council for Natural Sciences and Engineering at the Academy of Finland, Atmospheric Sciences and Geophysics Panel Member
2011	International Workshop on Urban Weather and Climate: Observation and Modeling (Chinese Meteorological Administration/ American Meteorological Society); International Scientific Committee
2010-	WMO Commission for Climatology Open Panels of CCI Experts (OPACE) member (nominated by UK)
2010-	University of Tokyo, Institute of Industrial Science, Research Fellow
2008-	JULES (Joint UK Land Environment Simulator) Science Steering Committee Group leader: Urban
2001-14	<i>Journal of Applied Meteorology & Climatology</i> , Associate Editor

VISITING POSITIONS

2013-14	Visiting Special Expert, Shanghai Institute of Meteorological Sciences, Shanghai Meteorological Bureau, China
2012	Visiting Scientist CSIRO Centre for Marine & Atmospheric Research, Pye Lab, Canberra, Australia
2012	Visiting Professor, Earth Sciences Göteborg U, Göteborg, Sweden
2009 -	Visiting Professor, Institute of Industrial Science, University of Tokyo, Japan
2009	Visiting Professor, Earth Sciences Göteborg U, Göteborg, Sweden
2007	Visiting Professor, Dept Civil Engineering, Monash U, Australia
2005	Visiting Scientist CSIRO Centre for Marine & Atmospheric Research, Pye Lab, Canberra, Australia
2004	Visiting Scientist CSIRO Centre for Atmospheric Research, Pye Lab, Canberra, Australia
2002, 2003 (2x)	Visiting Professor, Earth Sciences Göteborg U, Göteborg, Sweden
1997-98	Visiting Scientist CSIRO Land & Water, Pye Lab, Canberra, Australia
1997, 2000	Visiting Lecturer Earth Sciences Göteborg U, Göteborg, Sweden

GRANTS (multiple amounts indicate multiple proposals & awards)						Total
Principal Investigator						
		\$1948714 (~£1,301,644)	558,000 BF (~£12,500)	£256380	In kind	£1,597,524
2014-17	NERC – Case studentship with RMS London					£3 years+ fees
2012-13	UK Met Office, LCCP, Lloyds of London - <i>London Climate Change Partnership : Environmental observations requirement for London</i>					£28,000
2009-13	NERC /CEH Studentship <i>Quantifying evaporation pathways in the suburban environment</i>					£52,510+ 6 months
2008-10	UK Met Office P003174 <i>Variability of urban surface-atmosphere exchanges: evaluation of the UK Met Office JULES scheme</i> Studentship					£18,870
2008-10	UK Met Office P001550 <i>Urban Model Intercomparison Experiment</i>					£135,000
2006-07	UK Met Office PB/0000018 <i>Dataset evaluation & model inventory for an urban model intercomparison experiment</i>					£50,000
2005-06	Indiana Water Resources Research Center /US Geological Survey, US Dept Interior. <i>Characterizing hydrologic response in urbanizing watersheds in Indiana: Determination of changes in runoff coefficients</i>					\$29,501
2005-06	Energy Coordinating Agency/ US Dept Health & Human Services <i>Cool Homes Program Impact Evaluation: Philadelphia</i>					\$38,677
2003-07	US Dept Agriculture, Forest Service Cooperative Research Agreement Award 03-CA-11242343-082; 04-CA-11242343-124; 05-CA-11242343-115 <i>Carbon, water & heat eddy-covariance measurements in suburban, Baltimore, MD. July 1, 2003- June 30, 2007, P1 \$10,000. P2</i>					\$30,510

	\$10,000 P3: \$10,502.	
2003-05	Defense Threat Reduction Agency/Dept Army/Dept Energy, <i>Joint Urban 2003 Oklahoma City</i>	\$163,416
2002-03	National Science Foundation BCS-0095284 Geography & Regional Science, Research Experience for Undergraduate Students Supplement <i>Undergraduate research for Measurement & Modeling of Local Scale Energy & Mass Exchanges in Urban Environments</i> .	\$6000
2002-04	National Science Foundation [0221105] <i>Doctoral Dissertation Research: Examination of Local-Scale Spatial Variability of Heat Fluxes Across an Urban Area: Integration of Measurements, Remote Sensing, & Modeling</i> Co-PI: Brian Offerle.	\$11,983
2002	ASTER <i>Integrating meteorological observations & remotely sensed data to model urban-atmosphere energy exchange</i> Data Acquisition. Grimmond, Offerle, Fortuniak. 12 Scenes	
2001-06	National Science Foundation BCS-0095284 (Geography & Regional Science & International Program on Central & Eastern Europe) <i>Measurement & Modeling of Local Scale Energy & Mass Exchanges in Urban Environments</i> .	\$210, 834
2000-05	US Dept Agriculture, Forest Service Cooperative Research Agreement Award no: 00-CA-11242343-073; 01-CA-11242343-039; 02-CA-11232343-117 Northern Global Change Research (September 1, 2000-August 31, 2005) <i>Development of an eddy-covariance site at Cub Hill, Baltimore, MD. P1:\$20,041 P2: \$9750 P3: \$10,000.</i>	\$39,791
2000-03	NATO Collaborative Linkage Grant Award: 977460 <i>Local-Scale Surface-Atmosphere Energy Exchanges in the City of Łódź, Poland</i> . Co-Principal Investigators: K Klysik (Poland) & T Oke (Canada). BF 558,000 Belgian Francs	
1999-01	US Dept Agriculture, Forest Service, <i>Urban forestry exercises: the integration of field measurements & GIS/Remote sensing</i> . Co- Principal Investigators: CJ. Souch (IUPUI) & J Wilson (IUPUI).	\$5500
1996-01	National Institute for Global Environmental Change, U.S. Dept Energy. <i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest</i> . Co-Principal Investigators: HP Schmid, SC Pryor, & RJ Barthelmie. Year 1: \$339,852, Year 2: \$314,741. Year 3: \$263,251.	\$917,844
1996-98	Indiana Dept Natural Resources, Division of Forestry. <i>Urban forests & Climate: development of a database for Indianapolis</i> . Co-Principal Investigator: C Souch, IUPUI.	\$20,000
1994-98	US Dept Agriculture, Forest Service Cooperative Research Agreement 23-925. <i>Surface resistances in urban areas: Principal Investigator</i> . Stage IV \$9,963 Stage III \$100,873 Stage II \$3,500 Stage I \$41,190.	\$155,526
1994-96	City of Bloomington. Graduate student geographic information system (GIS) internship program. Year I: \$12,652. Year 2: \$14,929.	\$27,581
1991-95	Southern California Edison, Principal Investigator. Stage V: <i>Local scale evaporation from residential areas of Los Angeles Metropolitan Area: Coachella Valley Fixed Tower Installation</i> C4064902. \$46,166 Stage IV: <i>Local scale evaporation from residential areas of Los Angeles Metropolitan Area: San Gabriel & Coachella Valleys</i> . C4044903 \$86,429 Stage III: <i>Local scale evaporation from residential areas of Los Angeles Metropolitan area: San Gabriel Valley (LAMA) above canopy flux measurement</i> C4043909 \$110,000. Stage IIa,b. <i>Local scale evaporation from residential areas of Los Angeles Metropolitan area: Los Angeles Metropolitan Area (LAMA) above canopy meteorological instrumentation & fixed tower installation (a)</i> C403301 \$40,000 (b) C4033001 \$3,942 Stage I <i>Local scale evaporation from residential areas of Los Angeles Metropolitan areas</i> C2052905. \$20,000.	\$306,537
1991	National Science Foundation NSF SES-9144227 Geography & Regional Science, Research Experience for Undergraduate Students Supplement. <i>Undergraduate research experience in development & evaluation of continuously weighing mini-lysimeters</i> . Principal Investigator.	\$4,875
1991-93	US Dept Agriculture, Forest Service Cooperative Research Agreement 23-546. Stage IV: <i>Calibration of Chicago Urban Forest Climate Project meteorological instrumentation</i> . \$4,000 Stage III: <i>Urban hydroclimate flux measurements</i> , Chicago, Illinois \$25,000 Stage II: <i>Preliminary investigation of data resources for urban hydroclimate & vegetation studies for Chicago, Illinois</i> \$11,010. Stage I: <i>Climatological observations for urban hydroclimate & vegetation studies</i> \$44,980.	\$84,990
1990-93	National Science Foundation NSF EAR-9050419 <i>Instructional equipment for fieldwork in climatology & meteorology</i> . Principal Investigator \$49,900. Indiana University matched the NSF grant. \$55,039.	\$104,939
1990-91	US Dept Agriculture, Forest Service Cooperative Research Agreement 23-526. <i>The effect of vegetation on the hydroclimate of cities</i> . Co-Investigators: G McPherson, U Arizona, TR Oke, U British Columbia.	\$12,000
1990-91	National Science Foundation NSF SES-8921919 Geography & Regional Science, <i>Development & evaluation of continuously weighing mini-lysimeters</i> . Co-Principal Investigator: S Isard, U Illinois. IU: \$18,956.	\$25,294

Co-Principal Investigator

	US \$ 13,326,590 (~£8,896,000)	CAD \$ 1,447,000 (~£940,000)	FF 150,000 (~£20,650)	In kind	€ 6,499,000 (~£5,860,000)	£3,305,033	£20,147,751
2013-15	Belmont/ NERC Transformation and Resilience on Urban Coasts (TRUC), Belmont Forum Coastal Vulnerability Grant, £1m , 1/9/2013-2015 Pelling M (lead PI, KCL), Agboola J, Birhmann J, <u>Grimmond</u> (lead PI, Reading), Solecki W, Ramachandran R, Yamamuro M (NE/L008971/1, G8MUREFU3FP-2201-075)						£98,176
2013-15	Belmont/NERC Metropole, Forum Coastal Vulnerability Grant, £1m (£275k to KCL), Karger M (lead PI, USA), Orsini J, Pelling M, Merrill S, Nunes L, Chou S, Aragao S, <u>Grimmond</u> , Reynolds C, Kartez J, Lockman J, Vairavamooth K						£275,000
2011-12	NERC/ARSF ClearFlux – London cross sectional flights for flux measurements and vertical profiling of CO ₂ , O ₃ and PM. B Barratt [PI], D Green, A Font, <u>Grimmond</u> , J-A Morgui GB11/05						In kind
2011-15	European Commission Framework 7 FP7-ENV-2011 283201 Building Resilience Across Communities in Europe (emBRACE) Debarati Giha-Sapir (Universite Catholique de Louvain Belgium, PI) (M Pelling (PI KCL), <u>Grimmond</u> (30/9/15) (Reading amount still to be transferred						€ 313,277
2011	NERC Field Spectroscopy Facility (FSF) 616.1110 Investigating the Urban Energy Balance of London (PI: Martin Wooster), <u>Grimmond</u> , Kotthaus (PhD student)						In kind
2011-13	NERC High density temperature measurements within the urban environment (HiTemp) (Lead Lee Chapman, University Birmingham) (PI KCL) NE/I007032/1(KCL/Reading £51029 FEC, £40823)						£651,068
2011-14	EPSRC EP/I00159X/1 EP/I00159X/2 Materials Innovation Hub: Connecting Materials Culture to Materials Science (Lead: Mark Miodownik) <u>Grimmond</u> , A Read, Anderson, MJ Lawrence (CI)						£463,033
2010-12	Natural Environmental Research Council ClearfLo: Clean Air for London (Lead: Prof Stephen Belcher, University Reading). <u>Grimmond</u> (PI for KCL with F Kelly) (KCL:£878,568 FEC) NE/H003231/1 01/01/10						£2.8 million
2008-11	European Commission Framework 7 FP7-ENV-2007-1 Megacities: Emissions, urban, regional & global atmospheric pollution & climate effects, & integrated tools for assessment & mitigation (MEGAPOLI) 212520 Alexander Baklanov (Danish Meteorological Institute, PI), Mark Lawrence (Max Planck Institute for Chemistry in Mainz, Germany, PI) Spyros Pandis (U Patras, Greece, PI) <u>Grimmond</u> (PI for KCL with M Wooster, F Kelly, S Beevers) (KCL:£75,761/97,129 €)						€3,399,000
2008-11	European Commission Framework 7 FP7-ENV-2007-1 Sustainable urban planning decision support accounting for urban metabolism (BRIDGE) 211345 Nektarios Chrysoulakis (Forth, Greece, PI) <u>Grimmond</u> (PI KCL with M Wooster, F Kelly, S Beevers) (KCL:£296,252/ 379,810 €)						€3,100,000
2008-	NERC Airborne Remote Sensing Facility & Field Spectroscopy Facility, Overflights & Equipment loans Investigation of the Urban Energy Exchanges of London, (M Wooster, <u>CSB Grimmond</u> , J Voogt). (GB08/19)						In kind
2007-10	National Institute for Global Environmental Change, U.S. Dept Energy <i>Ecosystem-Atmosphere Exchange of Carbon, Water & Energy over a mixed deciduous forest in the Midwest</i> HP Schmid, D Dragoni, <u>CSB Grimmond</u> , JC Randolph, JR White. Annual report: http://www.osti.gov/bridge/servlets/purl/1057580/1057580.pdf FY 2007/08						\$630,500
2007-11	US National Science Foundation ATM-0710631 Influence of urbanization on weather in the arid Phoenix metropolitan area Co-PIs: S Grossman-Clarke, <u>CSB Grimmond</u> , (J Zehnder)						\$447,808
2006-10	Canadian Foundation for Climate & Atmospheric Sciences (CFCAS) <i>Environmental Prediction for Canadian Cities</i> Pls J Voogt & T Oke + 9 co-applicants (co-applicant)						\$1,447,000 (CAD)
2005-06	Greater London Authority, <i>The Urban Heat Island in London</i> , Co-PIs: G McGregor, S. Belcher, J Hacker, S Kovats, J Salmond R Watkins, M Wooster						£42,000
2005-07	National Institute for Global Environmental Change, U.S. Dept Energy. <i>Forest-Atmosphere Exchange of CO₂ over a Mixed Hardwood Ecosystem in the Midwest</i> . Co-Principal Investigators: HP Schmid, HB Su. Year 1: \$204,738 Year 2. Year 3						~\$600,000
2004-09	National Science Foundation DEB Human Settlements as ecosystems: Metropolitan Baltimore from 1797-2100: Phase II PI S Pickett (+ 30 Co-PI). Co- PI						\$4,920,000
2002-05	National Institute for Global Environmental Change, U.S. Dept Energy. <i>Forest-Atmosphere Exchange of CO₂ over a Mixed Hardwood Ecosystem in the Midwest</i> . Co-Principal Investigators: HP Schmid, HB Su. Year 1: \$256,250 Year 2: \$236,353 Year 3: \$202,649 T						\$695,252
2000-02	ESCOMPTE (Expérience sur Site pour CONtraindre les Modèles de Pollution atmosphérique et de Transport d'Emissions: Field experiment to constraint models of atmospheric pollution & emissions transport). PATOMS (Programme Atmosphere et Ocean Multi-echelle) <i>Local-Scale Surface Energy Balance Measurements in Marseille, France during the ESCOMPTE field campaign</i> Co-Principal Investigators: J Noilhan (France), T Oke (Canada).						100,000 French Francs

2000-02	PNTS (Programme National de Teledetection Spatiale). <i>Local-Scale Surface Energy Balance Measurements in Marseille, France during the ESCOMPTE field campaign</i> . Co-Principal Investigators: J Noilhan (France) T Oke (Canada)	50,000 French Francs
1999-02	National Institute for Global Environmental Change, U.S. Dept Energy. <i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest Stage II</i> . Co-Principal Investigator: HP Schmid Year 1: \$206,938 Year 2: \$223,460 Year 3: \$194,239.	\$624,637
1998-04	National Science Foundation DEB 9714835. Human Settlements as ecosystems: Metropolitan Baltimore from 1797-2100 P I S Pickett (+12 others +20 Collaborators). Collaborator then Co-PI	\$4,200,000 + 1 y extension
1997-98	Indiana University Intercampus Research Fund. <i>Post-fire regeneration of tropical forest remnants, Dominican Republic</i> Co-Principal Investigator: TS Brothers, IUPUI	\$9998
1994-98	National Institute for Global Environmental Change, U.S. Dept Energy. The effect of variability in microclimate & regional climate on the productivity of neo-tropical migrant land birds in Midwestern Forests: Application to climate change scenarios. <i>Co-Principal investigators: DR Whitehead & SM Robeson</i> . Year 1 \$90,000. Year 2 \$153,423. Year 3: \$150,000.	\$393,423
1990-92	National Institute for Global Environmental Change, U.S. Dept Energy. <i>Climatic influences of land surface conditions in the Midwest United States</i> . Co-Principal Investigators: AM Carleton, IU & DR Easterling, IU/National Climatic Data Center	\$84,972

TRAVEL AWARDS (excluding travel supported applied/provided for by others on my behalf)

2006	WMO to IAUC to support travel for four participants to ICUC6 \$10,863
2002	IU President's Council on International Programs International Projects & Activities Grant: Burkina Faso
2000	IU President's Council on International Programs International Projects & Activities Grant: Poland
1999	IU Overseas Conference Fund Travel Award (England IUGG)
1996	IU Overseas Conference Fund Travel Award (Germany ICUC)
1993	National Science Foundation / American Geophysical Union Travel Award (Japan IAHS)
1993	IU Overseas Conference Fund Travel Award (Japan IAHS)
1989	Indiana Center for Global Change & World Peace (Travel) Award (Japan ICUC)
1989	IU Overseas Conference Fund Travel Award (Japan ICUC)

Travel Support Provided by Others (not included in Grants or Awards)

June 2010	British Embassy, Tokyo, Japan
Sept 2009	World Climate Conference – 3, WMO Geneva, Switzerland
Mar 2009	COST-728 Meeting, Madrid, Spain
Feb 2008	COST-728 Meeting, Utrecht, Netherlands
Oct 2007	COST-728 Meeting, Istanbul, Turkey
Aug 2007	Shanghai Meteorological Bureau/World Meteorological Organization, Shanghai, China
May 2007	European Space Agency, Athens, Greece
Nov 2006	Max-Planck Institute for Biogeochemistry, Jena, Germany
Aug 2006	International workshop on countermeasures to urban heat islands, Tokyo, Japan
Oct 2005	Dept Mechanical & Aerospace Engineering, Arizona State University, AZ, USA
Sept 2005	Royal Geographical Society/Institute of British Geographers, London, England
Aug 2005	CSIRO, Canberra, Australia
July 2005	Universities Weather Research Network: Urban Climates, Cambridge, England
May 2005	World Meteorological Organization, Expert Team 3.9 Urban Climatology, Geneva, Switzerland
May 2005	Office for Federal Coordinator for Meteorology, Silver Springs, MD, USA
Mar 2005	King's College London, England
Feb 2005	Dept Geography, UCLA, USA
Feb 2005	International Institute for Sustainability, Arizona State University, AZ, USA
Oct 2004	Numerical Prediction Research Division, Meteorological Research Branch, Environment Canada, Dorval, Canada
Sep 2004	Office for Federal Coordinator for Meteorology, Rockville, MD, USA
Jun 2004	Earth Sciences Göteborg University, Göteborg, Sweden
May 2004	Dept Meteorology, U Reading & UK Met Office, Reading, England
Mar 2004	School of Geography, Earth & Environmental Sciences, U Birmingham, England
Ja/Feb 2004	CSIRO Healthy Country: Designing water sensitive urban areas, Canberra & Melbourne, Australia
Dec 2003	U Otago, Dunedin, New Zealand
Nov 2003	Earth Sciences Göteborg University, Göteborg, Sweden
Oct 2003	Berkeley Atmospheric Sciences, University California, Berkeley, California, USA
Jun 2003	Earth Sciences Göteborg University, Göteborg, Sweden
May 2003	US Weather Research Program, Houston, Texas, USA

Jul 2002 IGBP-GCTE Focus 1, Salt Lake City, Utah, USA
 Jun 2002 Earth Sciences Göteborg University, Göteborg, Sweden
 Nov 2001 US Weather Research Program, PDT11, Palm Springs, CA, USA
 Sep 2000 Earth Sciences Göteborg University, Göteborg, Sweden
 Apr 2000 European COST 715, Antwerp, Belgium
 Oct 1997 Earth Sciences Göteborg University, Göteborg, Sweden
 Oct 1993 Dept Geography, U Illinois, Champaign-Urbana, Illinois, USA
 May 1993 Centro de Ciencias de la Atmosfera, Universidad Nacional Autonoma de Mexico, Mexico DF, Mexico
 Mar 1993 Dept Geography, U Delaware, Newark, Delaware, USA
 Feb 1993 USDA Forest Service, North East Forest & North Central Forest Experimental Stations, Chicago, IL, USA
 Oct 1992 Dept Geography & Meteorology, Northern Illinois University, DeKalb, Illinois, USA
 Sep 1992 National Acid Precipitation Assessment Program workshop, Raleigh, North Carolina, USA
 Jun 1992 Florida Solar Energy Research Center, Cape Canaveral, Florida, USA
 Mar 1992 Environmental research group of Southern California Edison, Rosemead, California, USA
 Feb 1992 Illinois State Water Survey, Champaign-Urbana, Illinois, USA
 Mar 1991 Dept Geography, Ohio State University, Columbus, Ohio, USA
 Nov 1990 Environmental research group of Southern California Edison, Rosemead, California, USA
 May 1989 Dept Meteorology, San Jose State University, San Jose, California, USA

PUBLICATIONS [143 total]

(ε indicates edited volume, p partially refereed in journal, * student, RA, Post-doc)

Refereed

In review with co-authors

Font A, **Grimmond** CSB, Morguá J-A, Kotthaus S*, Priestman M, Barratt B *Daytime CO₂ urban-regional scale surface fluxes from airborne measurements, eddy-covariance observations and emissions inventories in Greater London*

Ward* HC, JG Evans, CSB **Grimmond** Infrared and millimetre-wave scintillometry in the suburban environment – Part 2: large-area sensible and latent heat fluxes

Ward* HC, JG Evans, CSB **Grimmond**, J Bradford Infrared and millimetre-wave scintillometry in the suburban environment – Part 1: structure parameters

Submitted

1. Grimmond CSB, Ward HC, Kotthaus S How is urbanisation altering local and regional climate? *Handbook on Urbanization and Global Environmental Change*, ed KC Seto & W Solecki (submitted Mar 2/14)
2. ε Moors EJ, CSB **Grimmond**, A Veldhuizen, L Järvi*, F van der Bolt Urban water balance and hydrology models (Chapter 10) *Understanding Urban Metabolism* ed N Chrysoulakis, E Castro, E Moors (submitted Feb 2014) ε
3. ε Magliulo V, P Toscano, CSB **Grimmond**, S Kotthaus*, L Järvi*, H Setälä, F Lindberg*, R Vogt, T Staszewski, A Bubak, A Synnefa, M Santamouris Environmental measurements in BRIDGE case studies (Chapter 5) *Understanding Urban Metabolism* ed N Chrysoulakis, E Castro, E Moors (submitted Feb 2014)
4. ε **Grimmond** CSB, L Järvi*, F Lindberg*, S Marras, M Falk, T Loridan*, G Pigeon, DR Pyles, D Spano Urban Energy Budget Models (Chapter 9) *Understanding Urban Metabolism* ed N Chrysoulakis, E Castro, E Moors (submitted Feb 2014)
5. ε Lietzke B, R Vogt, DT Young*, CSB **Grimmond** Physical fluxes in urban environment (Chapter 4). *Understanding Urban Metabolism* ed N Chrysoulakis, E Castro, E Moors (submitted Feb 2014)
6. Tan J, L Yang, CSB **Grimmond**, J Shi, W Gu, Y Chang, P Hu, J Sun Urban Integrated Meteorological Observations: Practice and Experience in Shanghai, China *Bulletin of the American Meteorological Society* (BAMS)
7. Bohnenstengel SI, Belcher SE, Allan JD, Allen G, Bacak A, Bannan TJ, Barlow JF, Beddows DCS, Bloss WJ, Booth AM, Chemel C, Coceal O, Di Marco CF, Faloon KH, Fleming Z, Furger M, Geitl JK, Graves RR, Green DC, **Grimmond** CSB, Halios C, Hamilton JF, Harrison RM, Heal MR, Heard DE, Helfter C, Herndon SC, Holmes RE, Hopkins JR, Jones AM, Kelly FJ, Kotthaus* S, Langford B, Lee JD, Leigh RJ, Lewis AC, Lidster RT, Lopez-Hilfiker FD, McQuaid JB, Mohr C, Monks PS, Nemitz E, Ng NL, Percival CJ, Prévôt ASH, Ricketts HMA, Sokhi R, Stone D, Thornton JA, Tremper AH, Valach AC, Visser S, Whalley LK, Williams LR, Xu L, Young DE, Zotter P Meteorology, air quality, and health in London: The ClearLo project *Bulletin of the American Meteorological Society* (BAMS) (9/12/13)
8. Kotthaus* S, TEL Smith, MJ Wooster, CSB **Grimmond** (2014) Derivation of an urban materials spectral library through emittance and reflectance spectroscopy *ISPRS Journal of Photogrammetry and Remote Sensing* (17/2/14 in review)
9. Järvi L, CSB **Grimmond**, M Taka, H Setälä, A Nordbo, IB Strachan Development of the Surface Urban Energy and Water balance Scheme (SUEWS) for cold climate cities Geoscientific Model Development (GMD) MS No.: gmd-2013-163 (11 Nov 13) <http://www.geosci-model-dev-discuss.net/7/1063/2014/gmdd-7-1063-2014.pdf>
10. Lindberg F, CSB **Grimmond** Sunlit fractions on urban facets – Impact of spatial resolution and approach (revision submitted February 2014)

11. Onomura S, **CSB Grimm**ond, F Lindberg, B Holmer, S Thorsson BLUEWS - Meteorological forcing data for urban outdoor thermal comfort models from a coupled convective boundary layer and surface energy balance scheme *Urban Climate* (submitted 19/2/14)

Accepted/In press

12. Young DT, L Chapman, CL Muller, CSB **Grimm**ond and X-M Cai A low-cost wireless temperature sensor: evaluation for use in environmental applications *JAOT* (accepted 12/02/14)
13. Ward* HC, JG Evans, CSB Grimm ond Multi-scale sensible heat fluxes in the urban environment from large aperture scintillometry and eddy covariance. *Boundary Layer Meteorology* (accepted 8/2/14)
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97. ‡Robeson SM, **CSB Grimm**, J Schoof 1998: Comparison of open-site & below-canopy climatic conditions within an eastern North American deciduous forest. *Preprints of the AMS 23rd Agricultural & Forest Meteorology conference*, 184-187.
98. ‡Voogt JA, **CSB Grimm** 1998: Modeling the Surface Energy Balance using Complete Urban Surface Temperatures. *Preprints 2nd Second Urban Environment Symposium*, AMS, 98-99.
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- urban-rural landscape. *Preprints 2nd Second Urban Environment Symposium*, AMS, 160-163.
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 104. King TS, **CSB Grimmond** 1997: Transfer mechanisms over an urban surface for water vapor, sensible heat & momentum *Preprints 12th Conference on Boundary Layers & Turbulence*, AMS, 455-456.
- 1996**
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 109. ‡ Nowak DJ, EG McPherson, **CSB Grimmond**, GM Heisler, RH Grant, C Souch, RA Rowntree: The Chicago Urban Forest Climate Project. *Proc. 1995 Excellence in Housing Conference*, Energy Efficient Building Association, Minneapolis, MN. Mar 1995.
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117. ‡ **Grimmond S** 1991: Comparisons of measured summer suburban & rural energy balances for a hot dry city, Tucson, Arizona. *Preprints 10th Conf. Biometeorology & Aerobiology*, AMS, September 10-13, 1991. Salt Lake City, Utah.
 118. **Grimmond S**, C Souch 1991: The effect of vegetation on the hydroclimate of cities: A surface data collection methodology. *USDA Forest Service Cooperative Research Agreement #23-526*, 28pp.
 119. Berlin C & **S Grimmond** 1991: Chicago Urban Forest Climate Project: Initial sources. *Chicago Urban Forestry Climate Project*, USDA Forest Service Cooperative Research Agreement #23-546, 76pp.
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120. **Grimmond CSB** 1990: Urban climates & global warming. *InterCon*, 1 2:2-3.
 121. ‡ **Grimmond CSB**, TR Oke 1990: Preliminary comparisons of measured summer suburban & rural energy balances for a hot dry city, Tucson, Arizona. *Proc. International Symposium on Urban Climatology, Air Pollution & Planning in Tropical Cities*. Guadalajara, Mexico, November 25-30 1990, 101-104.

1988

122. ‡Oke TR, HA Cleugh, **CSB Grimmond** 1988: Evapotranspiration from urban areas. *Proc. of the International Symposium on Hydrological Processes & Water Management in Urban Areas*, UNESCO, Duisburg, Germany, Apr 24-29, 1988, 107-112.
123. ‡Oke TR, HA Cleugh, **CSB Grimmond**, HP Schmid, M Roth 1988: Evaluation of spatially-averaged fluxes of heat, mass & momentum in the urban boundary layer. *Proc Symposium on Topoclimatological Investigation & Mapping*, International Geographical Union, Christchurch, New Zealand.

1985

124. ‡ **Grimmond CSB** 1985: Urban water balance: an integrating framework. World Meteorological Organization Conference on Urban Climatology & its Applications with Regards to Tropical Areas, Mexico City, Mexico. World Meteorological Organization, Technical Document No. 7.

1981

125. **Grimmond CSB** 1981: An evaluation of the contents of some New Zealand environmental impact reports. U Otago, Geography Discussion Paper No. 27.

1979

126. **Grimmond CSB** 1979: Kakanui catchment water resources. Report to the Otago Catchment Board, New Zealand.

INVITED PRESENTATIONS

[150 total]

Countries: Australia, Belgium, Canada, China, Czech Republic, Finland, France, Germany, Greece, Hong Kong, Italy, Japan, Mexico, Netherlands, New Zealand, Poland, South Korea, Sweden, Switzerland, Thailand, USA, UK

To give

1. Representing urban areas in environmental prediction models World Weather Open Science Conference, August 16-21, 2014, Montreal, Canada, organized by WMO, ICSU, Environment Canada, and the National Research Council Canada (see <http://wwosc2014.org/>). (Keynote)

2014

2. Grimmond S, Jian-Guo TAN, Xiangyu AO, CHANG Y Y, Xin-Shu FU, GU Wen , Zhihui HAN, Dongwei LIU, Jie PENG, J SHI, TANG Yuqi, Tongxiao YANG Understanding the Urban Micrometeorology of Shanghai: Contributions, Challenges and Future Needs, Shanghai Meteorological Bureau, China Meteorological Administration Shanghai 20 March 2014
3. Institute Urban Meteorology, China Meteorological Administration, Beijing, China 12 March 2014
4. From clouds to cloud computing: The role of observations in the history of urban climatology 11th Symposium on the Urban Environment; the 12th History Symposium; and the Stanley A. Changnon Symposium 4 February 2014
<https://ams.confex.com/ams/94Annual/webprogram/Paper233216.html>

2013

5. Cities and Global Environmental Change: With emphasis on heat and carbon exchanges Academy For Co-Creative Education Of Environment And Energy Science (Aceeess) At Tokyo Institute Of Technology, The Second International Education Forum On Environment And Energy Science, Los Angeles 13-17 December 2013
6. Grimmond CSB, S Kotthaus, HC Ward, JG Evans, A Bjorekgren, J Minns, A Christen Surface controls on Urban Carbon exchanges Urban Environmental Pollution 2013 Asian Edition Creating Healthy, Liveable Cities, 17-20 November 2013, Beijing, China
7. Challenges to Conducting Observations In Urban Areas: Examples from London, WISE International Workshop, Seoul , South Korea, 19-21 June 2013
8. Urban meteorology: Support for Future Urban Environmental Challenges, Risk Management Solutions, London, 5 June 2013
9. Urban Meteorology: Support for Urban Environmental Problems from City to Person Scales, Shanghai Meteorological Service, Shanghai, China 20 May 2013
10. Observing London: Weather data needed for London to thrive, Retrofitting homes for a future climate: emerging trends from recent industry surveys on climate change adaptation, Wednesday 24th April 2013 King's College London
11. Atmospheric Physics Seminars, Imperial College London, 19 February 2013
12. Analysis of Surface Characteristics to Understand Urban Climate, DIGITAL URBAN, King's College London, 15 February 2013
13. Future Cities – Urban Climates, **Future of the City - Princeton Global Forum**, Shanghai, China, 1 February 2013
14. Urban Meteorology Activities At King's College London, Met Office, Exeter, 22 January 2013

2012

15. Somerset House: Contrasting studies of urban climatology in the 19th and 21st Century Royal Meteorological Society National Wednesday Meeting, Classic Papers Meeting On Urban Meteorology, University Of Reading, 21 November 2012
16. 'Urban meteorological observation design' *Meteorological Science and Technology Progress and Urban Meteorological Service*, CMA (Shanghai Meteorological Bureau) and Meteo-France, Shanghai for the 140-year anniversary of the Xujiahui Observatory (Keynote) October 28, 2012
17. Cities today and in the future: Applications and challenges in urban climatology. *Kuehnast Endowment Lecture 20 th Anniversary*, University of Minnesota, USA 8 November 2012

18. Importance of Vegetation on Urban Surface-Atmosphere Exchanges: Evidence from measurements and modelling, Department of Earth Sciences, Göteborg U, Göteborg, Sweden, 13 September 2012
19. Linking Urban Measurements and Urban Land Surface Modelling, Urban and Rural Meteorology 2012 Workshop Jeju Island, South Korea. 27-29 August 2012
20. Importance of Vegetation on Urban Surface-Atmosphere Exchanges: Evidence from measurements and modelling, Department of Atmospheric Sciences, Yonsei University, Seoul, South Korea, 24 August 2012
21. Climate Change and Urban Systems, **Adaptation Partnership Workshop: Building Urban Climate Resilience in Asia**, USAID and the Adaptation Partnership, Bangkok, Thailand. July 31- August 2, 2012 (Plenary)
22. Impact of vegetation on urban heat, water and carbon exchanges. *Urban Environmental Pollution: Creating Healthy, Liveable Cities*, 17-20 June 2012, Amsterdam Netherlands (keynote)
23. Cities and Vegetation: impact on heat, water and carbon exchanges, *Wageningen University*, Netherlands
24. Urban meteorology and climatology: Some features & needs, *Vaisala*, Helsinki, Finland, 16 May 2012
25. Relevance of Vegetation to Urban Surface-Atmosphere Exchanges: Current Needs and Challenges in Urban Meteorology, Urban Symposium, Finnish Meteorological Institute, Helsinki, Finland, 14 May 2012
26. Urban Meteorology and Climatology: Overview of activities and needs. *Urban Symposium: Research in urban meteorology and climatology – Current activities and future prospects* CSIRO Marine and Atmospheric Research, CSIRO Complex Systems Science and CSIRO Climate Adaptation Flagship, 13-15 March 2012, Melbourne, Australia (Keynote)
27. International Urban Energy Balance Model Comparison: What have we learnt so far? *Urban Symposium: Research in urban meteorology and climatology – Current activities and future prospects* CSIRO Marine and Atmospheric Research, CSIRO Complex Systems Science and CSIRO Climate Adaptation Flagship, 13-15 March 2012, Melbourne, Australia
28. The importance of Vegetation on Urban Surface-Atmosphere Exchanges: Evidence from measurements and modelling, CSIRO Marine and atmospheric research, Canberra, Australia, 7 March 2012

2011

29. Urban Meteorology, *WMO GURME Workshop on Urban Meteorological Observation Design*, Shanghai Meteorological Bureau, Shanghai, China, December 11, 2011
30. Lessons learnt from Urban Energy Balance Models Evaluations. Urban Climatology For Tropical Regions, Advanced Study Institute: Croucher Foundation, The Chinese University Of Hong Kong, 5-10 December 2011.
31. Characterization of Energy Flux Partitioning in Urban Environments: Links with Surface Seasonal Properties, *WMO GURME Workshop on Urban Meteorological Observation Design*, Shanghai Meteorological Bureau, Shanghai, China, December 11, 2011
32. The importance of Vegetation on Urban Surface-Atmosphere Exchanges: Evidence from measurements and modelling, Meteorologisches Institut, Universität Hamburg, Germany, 17 November 2011
33. Loridan T, F Lindberg, O Jorba, S Kotthaus, **S Grimmond** Impact of a street tree planting scenario for London's Central Activity Zone (CAZ), Urban Climate Impacts/Natural Environment Meeting, Air Pollution Research in London (APRIL) City Hall, Greater London Authority, London, UK, 3 October 2011
34. **Grimmond CSB**, T Loridan, M Best, M Blackett, S Kotthaus, F Lindberg, L Pauscher, Urban Model Comparison team The importance of vegetation on urban surface-atmosphere exchanges: Evidence from measurements and modeling, 3rd iLEAPS Science Conference, Garmisch-Partenkirchen, Germany, 18-23 Sept 2011
35. Urban Meteorology: Scoping the problem, defining the needs (A Workshop). National Academies' Board on Atmospheric Sciences and Climate (BASC), July 27-28, Woods Hole, Massachusetts, USA (keynote)
36. **Grimmond CSB**, T Loridan, M Best The importance of vegetation on urban surface-atmosphere exchanges: Evidence from measurements and modeling, International Workshop on Urban Weather and Climate: Observation and Modeling, 12-15 July, 2011, Beijing, China. (keynote)
37. London's urban climate: a historical and contemporary perspective [Luke Howard to Boris Johnson?] ESRC City weathers: meteorology and urban design 1950-2010, 23-24 June 2011, at the University of Manchester, United Kingdom (keynote)

2010

38. *JULES –Urban: Overview of Activities*, November 19, 2010, Joint Centre for Mesoscale Meteorology, Met Office- University of Reading, UK
39. *How well can we Model Surface - Atmosphere Exchanges in Urban Areas?* June 1 2010, University of Tsukuba, Japan
40. *Using urban climate models for better adaptation plans: Strengths & areas for improvements*. International Workshop on Urban Climate Prediction for Better Adaptation Plan, June 2-3, 2010, University of Tsukuba, Japan
41. Comparison of modelling solar radiation & energy balances fluxes in urban areas. Solar Energy at Urban Scale, Urban Systems Engineering Department, Compiègne University of Technology, Compiègne, France, 25-26 May 2010
42. *Surface- Atmosphere Exchanges in Urban Areas: How well can we model these?* Bi-Annual GAC (Gothenburg atmospheric science centre) Conference, Gothenburg, Sweden, 19-20 May 2010, (Keynote)
43. *The role of urban climatology in urban policy: Can urban models inform policy & become more useful to decision-makers?* The Comparative Genetics of Cities, London, 21-23 May 2010
44. *How well can we Model Surface- Atmosphere Exchanges in Urban Areas?* University of Birmingham, UK, April 19, 2010

2009

45. Grimmond CSB, M Blackett, MJ Best, J-J Baik, SE Belcher, SI Bohnenstengel, I Calmet, F Chen, A Dandou, K Fortuniak, ML Gouvea, R

Hamdi, M Hendry, M. Kanda, T. Kawai, Y Kawamoto, H Kondo, S Krayenhoff, S-H Lee, T Loridan, A Martilli, V Masson, S Miao, K Oleson, G Pigeon, A Porson, Y-H Ryu, F Salamanca, L Shashua-Bar, G-J Steeneveld, M Tombrou, J Voogt, D Young, N Zhang, The PILPS-Urban experience: common guidelines for introducing a urban tile in NWP models. ECMWF/GLASS Land surface modelling, data assimilation & the implications for predictability Workshop, Reading, UK, 9-12 November 2009.

http://www.ecmwf.int/newsevents/meetings/workshops/2009/Land_surface_modelling/presentations.html

46. Urban Climates: Local to global impacts; UBC Geography's contribution to understanding, 50th Anniversary Department of Geography, University of British Columbia, Vancouver, BC, Canada, 25 September 2009
47. **Grimmond S**, M Roth, TR Oke, YC Au, M Best, R Betts, G Carmichael, H Cleugh, W Dabberdt, R Emmanuel, E Freitas, K Fortuniak, S Hanna, P Klein, LS Kalkstein, CH Liu, A Nickson, D Pearlmutter, D Sailor, J Voogt Climate Information for Improved Planning & Management of Cities: Producers/Capabilities Perspective, World Climate Conference-3: Better climate information for a better future. Geneva, Switzerland, 31 Aug. - 4 September 2009.
48. Urban surface atmosphere exchanges: Measurements & modelling, National Institute of Advanced Industrial Science & Technology (AIST), Tsukuba, Japan, 21 July 2009
49. Urban surface-atmosphere exchanges: results from modelling & measurements, Institute of Industrial Science, The U Tokyo, Japan, 17 July 2009

2008

50. Current conditions of urban flux measurement studies. Finnish-Japanese seminar: new opportunities for Finnish-Japanese Cooperation in urban land-atmosphere & air quality research, Helsinki, Finland 24-26 November 2008 (*keynote*)
51. **Grimmond CSB** & M Blackett International Urban Surface Energy Balance Model Comparison, ET4.4 Meeting WMO Geneva, Switzerland, 28-29 July 2008
52. Wu X, M Wooster, **S Grimmond** Demonstration of airborne hyperspectral data for mapping the urban energy budget of Shanghai. 4th Annual Seminar on Spatial Information Science & Technology/2nd Workshop on Earth Observation for Urban Planning & Management, The Hong Kong Polytechnic University, Hong Kong, 20-21 May, 2008
53. Urban Climate Models & their Applications Arizona State University, May 2008
54. Surface-Atmosphere Exchanges in Urban Areas: Measurements & Modelling, The Institute for Integrative & Multidisciplinary Earth Studies (TIIMES), NCAR, 14 May 2008

2007

55. Observations of atmospheric processes in urban coastal areas, 4th Polish conference "Urban Climate & Bioclimate" Lodz Poland, 29 November - 1 December 2007 (*Plenary*)
56. London Atmospheric Observatory, Air Pollution Research In London (APRIL) Climate Change: Thinking through strategies for London. Imperial College London, 22 November 2007
57. Understanding Urban Climates through Measurement & Modelling of Surface-Atmosphere Exchanges, U Basel, Switzerland, November 14 2007
58. Influence of the urban environment on air quality, MESO-NET NERC Knowledge Transfer Network Mesoscale Modelling for Air Pollution Applications Launch Meeting, UCL London, November 1 2007
59. Understanding physical characteristics of urban atmospheres from measurements & modelling, Environmental Research Group, London Air Quality Network, King's College London, October 30 2007
60. Understanding urban atmospheres from measurements & modelling, Dept Geography, U Sheffield, Sheffield, Oct 16 2007
61. **Observations of atmospheric processes in urban coastal regimes**, 7th Conf. on Coastal Atmospheric & Oceanic Prediction & Processes joint with **7th Symp. Urban Environment, 10-13 Sept 2007, San Diego, CA (Plenary)**
62. Understanding Urban Climates through Measurement & Modelling of Surface-Atmosphere Exchanges, 1st SSC Meeting the Shanghai WMO GURME Pilot Project, Shanghai Meteorological Bureau, China, August 18 2007.
63. Grimmond CSB, M Best, J Barlow. Progress on an urban surface energy balance model comparison study, COST-728 Model urbanization strategy, UK Met Office, Exeter, UK, 3-4 May 2007
64. The impacts of a changing climate: City. CABE/CIC (Commission for Architecture & the Built Environment/Construction Industry Council) Climate Impacts Seminar, London, March 29, 2007
65. Exposure of instruments in the urban environment; Royal Meteorological Society Special Interest Group on Meteorological Observing Systems Birmingham, March 19 2007
66. Challenges in Measuring Urban Fluxes of Carbon Dioxide & Water. Space & Atmospheric Physics Group, Imperial College London, March 6 2007
67. Grimmond, CSB, M Best, J Barlow Status of an urban surface energy balance model comparison study, COST-728, Brussels, March 1 2007
68. Measuring & Modelling Surface-Atmosphere Exchanges in Urban Environments: Focus on Water, Dept Civil Engineering, Monash U, Australia, February 8 2007

2006

69. Measurement of urban surface-atmosphere fluxes of CO₂ & water, Max-Planck Instit. Biogeochemistry, Jena, Germany, 29 Nov 2006
70. Understanding Urban Climates through Measurement & Modelling of Surface-Atmosphere Exchanges, Göteborg University, Göteborg, Sweden, October 20, 2006 (*Honorary Doctorate Seminar*)
71. Biophysical processes & UGEC: example of Urban Warming, *Urbanisation & Global Environmental Change: 21st Century challenges*,

Royal Geographical Society - Institute of British Geographers Annual conference 30 August-1 September 2006, London, England (*Plenary*)

- 72. Current state & future prospects of field measurements for urban warming & its countermeasures. Asian Symposium on Urban Environment & Energy, Institute of Industrial Science, The U Tokyo, 7-11 August, 2006
- 73. Current state & future prospects of field measurements. International workshop on countermeasures to urban heat islands, Tokyo, Japan August 3-4, 2006.
- 74. Grimmond S, Crawford B, Offerle B, Hom J. Measurement of Urban fluxes of CO₂ & water, Union Session: Urban Impacts on the Environment. American Geophysical Union, Baltimore, Maryland USA, 23-26 May 2006
- 75. Understanding urban climate: Measuring & Modeling Surface-Atmosphere Exchanges, Royal Meteorological Society, London, England February 15, 2006

2005

- 76. Understanding urban climate: Measuring & Modeling Surface-Atmosphere Exchanges, Geography & Interdepartmental Environmental Sciences Seminar, Indiana University, November 4, 2005
- 77. Understanding urban climate: Measuring & Modeling Surface-Atmosphere Exchanges, Environmental Fluid Dynamics, Dept Mechanical & Aerospace Engineering, Arizona State U, October 5, 2005
- 78. 'Man's [sic] role in changing the face of the Earth': Human impacts on climate of cities. Royal Geographical Society - Institute of British Geographers Annual conference 31 August-2 September 2005, London, England (*Plenary*)
- 79. Urban Meteorology Field Experiments: Approaches & Results from Field Campaigns. Urban climatology & its applications, UK UWERN (Universities Weather Research Network), Pembroke College, Cambridge, England (Keynote). July 7-8, 2005.
- 80. Urban micrometeorological flux observations & surface characterization, Helsinki Urban Modeling Workshop, Helsinki Mesoscale Testbed, Vaisala Oyj & the Finnish Meteorological Institute, Helsinki, Finland, 15-16 June 2005
- 81. (1) Review of activities related to the terms of reference of the Expert Team on urban climatology including training (2) Urban climate training materials (3) Bibliography on urban climatology: overview of activities to date. Meeting of the Expert Team on Urban Climatology including Training, Geneva, Switzerland, 23-25 May 2005
- 82. International data sets. Working Group For Environmental Support To Homeland Security (WG/ESHS) Meeting to Discuss the Recovery of Existing ATD Data (READ) May 10, 2005, OFCM Silver Spring, Maryland).
- 83. Measuring & Modeling Urban Climates: King's College, London, March 9th, 2005.
- 84. Understanding urban climates: Measuring & Modeling Surface-Atmosphere Exchanges UCLA, February 18, 2005
- 85. Urban surface-atmosphere exchanges: Focus on water, Ecoclimatology, Geography & Ecology, Arizona State U, Feb 17, 2005
- 86. Understanding urban climates: Measuring & Modeling Surface-Atmosphere Exchanges. Instit. for International Sustainability, Arizona State U, February 16, 2005

2004

- 87. Surface-Atmosphere exchanges in urban areas: observations & models. Numerical Prediction Research Division, Meteorological Research Branch, Environment Canada, Dorval, Canada, October 18, 2004
- 88. Regional ecosystem approaches to urban environmental hazard management panel. Challenges in Urban Meteorology A Forum for Users & Providers, Office of the Federal Coordinator for Meteorological Services & Supporting Research, Rockville, Maryland, September 21-23, 2004
- 89. Understanding urban climate: Measuring & Modeling Surface-Atmosphere Exchanges Dept Meteorology, U Reading, England, May 10, 2004
- 90. Variability of turbulence observed at one location: Marseille CBD. 2001). Climate & Atmosphere Research Group, School of Geography, Earth & Environmental Sciences, U Birmingham, England, March 11, 2004.
- 91. Surface-Atmosphere exchanges in urban areas: observations & models, School of Geography, Earth & Environmental Sciences, U Birmingham, England, March 10, 2004.
- 92. Cleugh HA, **CSB Grimmond**, B Offerle Remote Sensing of Urban Areas: Applications, Challenges & Opportunities, CSIRO Earth Observation Centre's Annual Science Meeting, Melbourne, Australia 3-5 March 2004.
- 93. Understanding urban climate: Measuring & Modeling Surface-Atmosphere Exchanges, CSIRO Atmospheric Research, Melbourne-Aspendale, Australia, 20 February, 2004.
- 94. Understanding urban climate: Measuring & Modeling Surface-Atmosphere Exchanges. Australian Meteorological & Oceanographic Society -Australian Capital Territory, Canberra, Australia, 17 February 2004.
- 95. Surface-Atmosphere exchanges in urban areas: observations & models. CSIRO Healthy Country: Designing water sensitive urban areas, Black Mountain Labs, Gungahlin, Canberra, Australia, 3 February, 2004.

2003

- 96. Urban Climatology: Measurements & Modelling, U Otago, Dunedin, New Zealand, December 18, 2003.
- 97. Carbon fluxes in urban areas. In "Human Interactions & the Carbon Cycle in North America" American Geophysical Union, 8-12 December, 2003.
- 98. Surface-Atmosphere exchanges in urban areas: observations & models. Third Atmospheric Science Symposium sponsored by the UC Berkeley Atmospheric Sciences Center (BASC), U California Berkeley, October, 2003.
- 99. Progress in measuring & observing the urban atmosphere. 5th Intern. Conf. on Urban Climate (ICUC-5), Lodz, Poland, September 1-5, 2003.

100. Offerle, B, **CSB Grimmond**, K Fortuniak, TR Oke & K Klysik. Temporal Variability in Heat Fluxes over Łódź. 5th International Conference on Urban Climate (ICUC-5), Lodz, Poland, September 1-5, 2003.
101. Variability of turbulence observed at one location: Marseille CBD, 2001. Göteborg U, Göteborg, Sweden, June 2003.
102. Energy Balance. Joint Urban 2003 Science Team Meeting, Oklahoma City, April 1-2, 2003.
- 2002**
103. Trace Gas Fluxes in Urban Ecosystems (Examples of Carbon Dioxide & Water). Ecological processes in urban ecosystems: Toward an international synthesis, IGBP-GCTE Focus 1, Global Change & Terrestrial Ecosystems Meeting, Salt Lake City, Utah, July 2002.
104. Salmond JA, **CSB Grimmond**, JA Voogt, TR Oke, S Roberts, B Offerle. Summary of observations & preliminary data analysis from the CAAM site during ESCOMPTE project. ESCOMPTE-CLU Meeting, Toulouse, France, June 2002.
105. Measurement of heat, water & carbon dioxide exchanges at three contrasting urban sites: Baltimore, USA; Marseille, France; & Lodz, Poland. Earth Sciences Centre, Göteborg U., Göteborg, Sweden, June 2002.
106. Modelling of heat & water in urban environments using urban parameterizations: LUMPS & TEB. Earth Sciences Centre, Göteborg U., Göteborg, Sweden, June 2002.
- 2001**
107. Physical Meteorology of Urban Areas. US Weather Research Program, Prospectus Development Team-11, Palm Springs, CA, November 2001.
108. Energy & mass flux results from three contrasting urban environments: Marseille, France; Lodz, Poland; & Baltimore, USA. School of Public & Environmental Affairs, Indiana University, October 2001.
109. Odland J, **Grimmond CSB**. How to submit a proposal to the National Science Foundation & get it funded (no guarantees). Dept Geography, Indiana University, October 2001.
110. Marseille Flux measurements during ESCOMPTE/CLU/TUE (site CAA - E10). Urban Boundary Layer Week, Meteo-France, Toulouse, France, October 2001.
111. Oke TR, **Grimmond CSB**. Simple parameterizations of urban climates. Ecosystem Seminar series, Environmental Fluid Dynamics. Dept Mechanical Engineering, Arizona State University, April 2001
112. Measurement & modeling of local-scale energy & mass exchanges in urban environments. Baltimore Ecosystem Study Science Meeting, John Hopkins University, Baltimore, January 2001 (presented by D Nowak).
- 2000**
113. Spatial variability of surface energy balance fluxes in urban areas: measurements & a simple parameterization scheme (LUMPS). Atmospheric Science, U Lodz, Poland, November 2000.
114. Measuring carbon fluxes in urban environments using micrometeorological techniques. Workshop on Advances in Terrestrial Ecosystem Carbon Inventory, Measurements & Monitoring, USDA Forest Service, Raleigh NC, Oct 2000.
115. Spatial variability of surface energy balance fluxes in urban areas: measurements & a simple parameterization scheme (LUMPS). Earth Sciences Centre, Göteborg University, Göteborg, Sweden, September 2000.
116. The role of forests in climate change. Mini University, Indiana University, Bloomington, Indiana, 23 June 2000.
117. **Grimmond CSB**, Oke TR A Local-scale Urban Meteorological Pre-processing Scheme (LUMPS), COST 715 Workshop on Preparation of meteorological input data for urban site studies, Prague, Czech Republic, 15 June 2000.
118. Oke TR, **Grimmond CSB**. Acquisition, interpretation & use of a multi-city urban climate data set. Institute of Climate, ETH, Zurich, Switzerland, June 13, 2000.
119. **Grimmond CSB**, Oke TR. Heat fluxes in cities. COST 715 "Urban surface energy balance", Antwerp, Belgium, 12 April 2000.
120. Oke TR, **Grimmond CSB**. Urban-rural differences in the surface energy balance. COST 715 "Urban surface energy balance", Antwerp, Belgium, 12 April 2000.
121. **Grimmond CSB**, Oke TR. Acquisition & use of a comprehensive urban micrometeorological dataset. Meteo-France, Centre National de Recherches Météorologiques, Toulouse, France, 10 April 2000.
- 1999**
122. Urban hydroclimate: the importance of evapotranspiration at different scales Intern. Conf. on Urban Climate 1999 (ICUC'99) Sydney, Australia. November 1999.
123. Schmid HP, **Grimmond S**, Su HB, Offerle B, Cropley F, Vogel C, Teeri J, Curtis P Atmosphere-Biosphere Exchange: Results from two AmeriFlux Towers. Atmospheric Sciences, U. British Columbia, Vancouver, Canada. Aug 1999.
124. Micrometeorological measurements in urban areas. UK Met Office, Bracknell, England, July 1999.
125. Schmid, HP, **Grimmond S**, Su HB, Offerle B, Cropley F, Vogel C, Teeri J, Curtis P. Atmosphere-Biosphere Exchange: Results from two AmeriFlux Towers. U. Michigan Biological Station (UMBS), Pellston, Michigan, July 1999.
126. Exchanges of CO₂ over a Midwestern Forest, Dept Biology, Indiana University, Bloomington, Indiana. February 1999.
- 1998**
127. Evaporation. Dept Geography, U. Otago, Dunedin, New Zealand. March 1998.
128. How rough is a city? Dept Geography, U Canterbury, Christchurch, New Zealand, February 1998.
- 1997**
129. How rough is a city? Earth Sciences Centre, Göteborg U. Göteborg, Sweden. October 1997.
130. Grimmond CSB, Barthelmie R, Johnston J, Pryor S, Schmid HP. The Morgan-Monroe State Forest CO₂ Flux Project, Geography, Indiana U, Bloomington, Indiana. September, 1997.

131. Grimmond CSB, Souch CJ. Physical Geography on the Web. Teaching & Learning Technology Lab Summer Conference, Indiana U, Bloomington, Indiana. May 1997.
- 1996**
132. Evaporation & urban hydroclimate: observation & modeling. Dept Geology, IUPUI, Indianapolis, Indiana. April 1996.
- 1995**
133. Heat storage in urban areas. Dept Physics Colloquium series & Geography, Geology & Anthropology Department (as part of Geography Awareness week), Indiana State University, Terre Haute, Indiana. November 1995.
- 1994**
134. Modifying urban climates: "Plant a tree cool the globe"? Mini-University, Indiana U, Bloomington, Indiana. June 1994.
- 1993**
135. Linking a meteorological source area model & a GIS to investigate water & energy exchanges. Association of American Geographers, West Lakes Meeting, Milwaukee, Wisconsin. October 7-9, 1993. Invited paper in Honor of David Miller.
136. The Chicago Urban Forest Climate Project: An overview & preliminary results. Dept Geography, U Illinois, Champaign-Urbana, Illinois. October 1993.
137. Urban energy balance measurements. Centro de Ciencias de la Atmosfera, Universidad Nacional Autonoma de Mexico, Mexico D.F., Mexico. May 1993.
138. Urban energy & water exchange: Measurement & modeling. Geography, U Delaware, Newark, Delaware. March 1993.
139. Energy & water exchanges at the local scale: Overview of research & current status. Chicago Urban Forest Climate Project Review, U.S.D.A. Forest Service, North East Forest Experimental Station & Forest Service, North Central Forest Experimental Station, Chicago, Illinois. February 1993.
- 1992**
140. Urban hydroclimate. Dept Geography & Meteorology, Northern Illinois U, DeKalb, Illinois. October 1992.
141. Meteorological measurement in urban areas. Florida Solar Energy Research Center, Cape Canaveral, Florida. June 1992.
142. Measurement & modeling of urban hydroclimatic fluxes. Environmental research group of Southern California Edison, Rosemead, California. March 1992.
143. Evaporation measurement & modeling. Illinois State Water Survey, Champaign-Urbana, Illinois. February 1992.
- 1991**
144. Urban hydroclimate & "Global ReLeaf". Dept Geography, Ohio State U, Columbus, Ohio. March 1991.
145. Evaporation in urban areas. Atmospheric Science program, Ohio State U, Columbus, Ohio. March 1991.
- 1990**
146. Urban hydroclimate measurement & modeling. Environmental research group of Southern California Edison, Rosemead, California. November 30, 1990.
147. Urban hydroclimate & "Global ReLeaf". Indiana Center on Global Change & World Peace, The access to resources working group, Indiana U, Bloomington, Indiana. April, 1990.
- 1989**
148. Urban evapotranspiration. Building Energy Analysis Group, Applied Science Division, Lawrence Berkeley Laboratories, UC Berkeley, California. August 1989.
149. Spatially consistent local scale urban energy balance. Mini course on the urban atmosphere. Dept Meteorology, San Jose State U, San Jose, California. May 1989.
- 1988**
150. Human impact on global climate. Geography & Regional Planning, Western Washington U, Bellingham, Washington, Feb, 1988.

CONFERENCE PRESENTATIONS [345 total]

(Presentations with proceedings papers (see ‡ above) are not repeated here, except for current year)

‡ Recipient of student award

2014

59. Björkegren and Grimmond AMS Boundary Layer and Turbulence, Leeds, June 2014 (*under review*)
60. Kotthaus et al. AMS Boundary Layer and Turbulence, Leeds, June 2014 (*under review*)
61. Grimmond et al. AMS Boundary Layer and Turbulence, Leeds, June 2014 (*under review*)
62. Ward, Evans, Grimmond AMS Boundary Layer and Turbulence, Leeds, June 2014 (*under review*)
63. Ward HC, S Kotthaus, CSB Grimmond, A Björkegren, M Wilkinson, JG Evans, JIL Morison, A Christen Variability in carbon dioxide fluxes for dense urban, suburban and woodland environments in southern England EGU European Geosciences Union General Assembly Vienna, Austria 27 April – 02 May 2014 (*under review*)
64. Järvi L, S Grimmond, M Taka, A Nordbo, H Setälä, I Strachan improvements in modeling the energy and water balances in cold climate cities using the Surface Urban Energy and Water balance Scheme (**SUEWS**) ILEAPS Nanjing (*under review*)
65. Ao X, J Tan, S Grimmond, Y Chang Eddy covariance observations of surface energy balance and carbon fluxes over a dense urban area in Shanghai, China ILEAPS Nanjing (*under review*)

66. Bellucco V, S Grimmond, S Marras, C Sirca, D Spano CO₂ fluxes estimation for different cover fractions 31st *Conference on Agricultural and Forest Meteorology/2nd Conference on Atmospheric Biogeosciences* (under review)
67. Grimmond S, L Jalkanen, D Terblanche, T Xu Integrated services addressing urban weather, climate and related environmental hazards Geospatial International Geneva, Switzerland May 5-9, 2014
68. Best M, CSB Grimmond How does the representation of vegetation within a urban land surface model influence the distribution of energy between the sensible and latent heat fluxes over a number of sites with varying land cover? 11th Symposium On The Urban Environment, Atlanta Georgia, USA 6 Feb 2014 <https://ams.confex.com/ams/94annual/Webprogram/Paper234291.html>
69. Kotthaus S, HC Ward, CSB Grimmond, JG Evans, A Bjorekegren, J Minns, A Christen Linking Carbon Dioxide Fluxes to Urban Density 11th Symposium On The Urban Environment, Atlanta Georgia, USA. 3 Feb 2014 <https://ams.confex.com/ams/94annual/webprogram/paper234985.html>
70. Best M, CSB Grimmond The importance of the anthropogenic heat flux for simulating the sensible and latent heat fluxes in an urban environment [11th Symposium on the urban environment](https://ams.confex.com/ams/94Annual/webprogram/Paper234238.html), Atlanta Georgia, USA (Poster) 5 Feb 2014 <https://ams.confex.com/ams/94Annual/webprogram/Paper234238.html>
71. Grimmond CSB, S Kotthaus, C Halios, J Barlow, W Morrison, L López Martínez S Onomura, D Young boundary layer heights obtained from two types of LIDAR observations in London during ClearfLo, 17th *International Symposium for the Advancement of Boundary-Layer Remote Sensing (ISARS 2014)* Auckland, New Zealand, 28-31 January, 2014. [HTTP://ISARS2014.ORG/WP-CONTENT/UPLOADS/2013/11/URBAN3.PDF](http://ISARS2014.ORG/WP-CONTENT/UPLOADS/2013/11/URBAN3.PDF)
72. Grimmond CSB, L Pauscher, J Mustchin, S Kotthaus, W Morrison, HC Ward, M Gouvea, J Barlow, C Halios, C Wood Scintillometry observations in London during ClearfLo. 17th *International Symposium for the Advancement of Boundary-Layer Remote Sensing (ISARS 2014)* Auckland, New Zealand, 28-31 January, 2014. [HTTP://ISARS2014.ORG/WP-CONTENT/UPLOADS/2013/11/URBAN2.PDF](http://ISARS2014.ORG/WP-CONTENT/UPLOADS/2013/11/URBAN2.PDF)

2013

73. Kotthaus S CSB Grimmond (2013) Using Turbulence Statistics to Interpret Turbulent Energy Exchanges Observed in a Dense City Centre, Academy For Co-Creative Education Of Environment And Energy Science (Aceeess) At Tokyo Institute Of Technology, The Second International Education Forum On Environment And Energy Science, Los Angeles 13-17 December 2013
74. Ward HC, JG Evans, CSB Grimmond Large-area heat fluxes from two-wavelength scintillometer systems over suburban surfaces Tübingen Atmospheric Physics Symposium Scintillometers and Applications 7 - 9 Oct 2013, Tübingen, Germany
75. Ward HC, JG Evans, CSB Grimmond Two-wavelength scintillometry over the suburban environment Tübingen Atmospheric Physics Symposium Scintillometers and Applications 7 - 9 Oct 2013, Tübingen, Germany
76. Mustchin J, L Pauscher, HC Ward, S Kotthaus, M Gouvea, CSB Grimmond Comparison of three large aperture scintillometer models over London Tübingen Atmospheric Physics Symp. Scintillometers and Applications 7 - 9 Oct 2013, Tübingen, Germany (poster)
77. Ward HC, JG Evans, CSB Grimmond Large-area heat fluxes from two-wavelength scintillometry in the suburban environment. 13th EMS Annual Meeting & 11th European Conference on Applications of Meteorology (ECAM), 09–13 Sept 2013, Reading, UK EMS2013-324
78. Ward HC, J.G. Evans, CSB Grimmond Multi-seasonal energy, water and carbon fluxes for a suburban area in the UK 13th EMS Annual Meeting & 11th European Conference on Applications of Meteorology (ECAM), 09–13 Sept 2013, Reading, UK EMS2013-319
79. Järvi L, S Grimmond, I Strachan, M Taka, H Setälä Modelling high-latitude urban surface energy and water balance fluxes 13th EMS Annual Meeting & 11th European Conference on Applications of Meteorology (ECAM), 09–13 Sept 2013, Reading, UK EMS2013-325
80. Kotthaus S, TEL Smith, MJ Wooster, CSB Grimmond Radiative Response of Impervious Urban Materials - Spectral Reflectance, Broadband Albedo and Surface Emissivity 13th EMS Annual Meeting & 11th European Conference on Applications of Meteorology (ECAM), 09–13 Sept 2013, Reading, UK EMS2013-243 (poster)

Papers presented

2012

81. Loescher HW, PM Groffman, DS Schimel, DE Pataki, N Grimm, C Polsky, H Powell, T Kampe, S Grimmond, D Tazik Key observations for long-term ecological understanding of urban environments, Ecological Society of America, Portland, 5-10 August 2012, OPS 2-15 (poster)
82. Grimmond CSB and T Loridan Urban energy flux partitioning: links to surface seasonal properties ICUC8, Dublin, Ireland, 6-10 August 2012 (T1D/512)
83. Chapman L, Muller CL, Cai X, Young DT, Grimmond CSB, An introduction to the Birmingham Urban Climate Laboratory, ICUC8, Dublin, Ireland, 6-10 August 2012 (M2A/19)
84. Muller CL, Chapman L, Young DT, Grimmond CSB, Cai X, Sensors & The City: Lessons learnt and a proposed protocol,, ICUC8, Dublin, Ireland, 6-10 August 2012 (M4E/54)
85. Evans JG, HC Ward, CSB Grimmond Scintillometry in the Urban Environment: First results from the Swindon experiment. ICUC8, Dublin, Ireland, 6-10 August 2012 (M3D/307)
86. Wood CR, Pauscher L, Ward HC, Barlow JF, Kotthaus S, Gouvea M, Lane SE, Grimmond CSB, A comparison of remote sensing methods for measuring wind velocities above the River Thames in central London ICUC8, Dublin, Ireland, 6-10 August 2012 (T3D/72)

87. Ward HC, JG Evans, CSB Grimmond Controls on Suburban Evaporation: First results from the Swindon experiment. ICUC8, Dublin, Ireland, 6-10 August 2012 (M3D/304)
88. Björkegren A, Kotthaus S, Grimmond CSB, Castillo C, Evaluation of CO2 balance components in a high-density urban environment ICUC8, Dublin, Ireland, 6-10 August 2012 (T23/370, Poster)
89. Järvi L, S Grimmond, A Christen, M Taka, H Setälä, S Kotthaus, A. Coutts, J. Berringer SUEWS – A new tool to simulate urban energy and water exchanges. ICUC8, Dublin, Ireland, 6-10 August 2012 (W3C/159)
90. Moilanen J, L Järvi, A Nordbo, S Haapanala, S Grimmond, T Vesala Urban energy balance in downtown Helsinki. ICUC8, Dublin, Ireland, 6-10 August 2012 (T29/103, Poster)
91. Best, Grimmond, Coutts, Berringer Is the performance of urban models sensitive to weather conditions? ICUC8, Dublin, Ireland, 6-10 August 2012 (T38/148, Poster) - *invited to be conference journal article*
92. Lindberg F, S Kotthaus, CSB Grimmond, J He, L Allen, M Iamarino LUCY - A community tool to determine spatial and temporal variations of Q_F ICUC8, Dublin, Ireland, 6-10 August 2012 (T17/182, Poster) (182.pdf)
93. Best MJ, CSB Grimmond, The impact of initial conditions within urban models. ICUC8, Dublin, Ireland, 6-10 August 2012 (T37/147, Poster) -- *invited to be conference journal article*
94. Best MJ, CSB Grimmond, Seasonal performance of results from the international urban model comparison. ICUC8, Dublin, Ireland, 6-10 August 2012 (T36/145, Poster)
95. Best MJ, CSB Grimmond, An overview of findings from the first international urban model comparison. ICUC8, Dublin, Ireland, 6-10 August 2012 (R4D/142)
96. Best MJ, CSB Grimmond, Can we answer the key scientific questions from the urban model comparison? ICUC8, Dublin, Ireland, 6-10 August 2012 (R4D/144)
97. Castillo MCL, DT Young, TEL Smith, and CSB Grimmond Evaluation of Mixing Layer Height Estimates from Ceilometer Backscatter in London. ICUC8, Dublin, Ireland, 6-10 August 2012 (T2D/122)
98. Lindberg F, CSB Grimmond 3D modelling of vegetation within a 2D model – evaluation and application. ICUC8, Dublin, Ireland, 6-10 August 2012 (F2E/180) (180.pdf)
99. Pauscher L, M Gouvea, S Kotthaus, CR Wood, JF Barlow, PD Smith, S Grimmond Large aperture scintillometer measurements in London. ICUC8, Dublin, Ireland, 6-10 August 2012 (T22/260, Poster)
100. Kotthaus, Grimmond, Identification of Micro-scale Anthropogenic Sources of CO2, Heat and Moisture. ICUC8, Dublin, Ireland, 6-10 August 2012 (T30/113, poster)
101. † Kotthaus S, CSB Grimmond, Long-term flux observations: energy, water and CO2 exchange in London. ICUC8, Dublin, Ireland, 6-10 August 2012 (M4D/112) -- *invited to be conference journal article*
102. Kotthaus S, CSB Grimmond, MJ Wooster At the interface between observations and modelling - application of the aerodynamic resistance for heat. ICUC8, Dublin, Ireland, 6-10 August 2012 (T31/115, poster)
103. Wood C, L Pauscher, HC Ward, R Kouznetsov, E J O'Connor, A Hirsikko, A Karppinen, JF Barlow, S Kotthaus, M Gouvea, SE Lane, CSB Grimmond Comparing lidar anemometry with observations from scintillometers and sonic anemometers; in London and Helsinki. 16th International Symposium for the Advancement of Boundary-Layer Remote Sensing, Boulder Colorado **5-8 June 2012**
104. Belcher SE, SI Bohnenstengel, J Allan, D Beddows, S Ball, J Barlow, A Björkegren, W Bloss, A Blyth, K Bower, B Bandy, C Chemel, A Christen, O Coceal, H Coe, D Carslaw, F Davies, C Di Marco, J Dorsey, Z Flemming, M Furger, M Gallagher, J Gietl, D Green, S Grimmond, M Heal, DE Heard, R Harrison, R Hepburn, J Hopkins, C Helfter, P Johnson, F Kelly, J Lee, R Leigh, A Lewis, J McQuaid, P Monks, E Nemitz, D Oram, L Pauscher, C Percival, A Prevot, C Reeves, A Reynolds, H Ricketts, R Sokhi, G Vaughan, S Visser, L Whalley, P Williams First results from ClearLo 8th International Conference Air Quality - Science and Application, Athens, 19 - 23 March 2012
105. Järvi L, CSB **Grimmond**, A Nordbo, H Setälä, M Taka, E Siivola, O Ruth, T Vesala, Helsinki, 2 February 2012

2011

106. Järvi L, CSB **Grimmond**, A Nordbo, H Setälä, M Taka, E Siivola, O Ruth, T Vesala Evaluation of the Surface Urban Energy and Water Balance Scheme (SUEWS) in Helsinki, 3rd iLEAPS Science Conference, Garmisch-Partenkirchen, Germany, 18-23 Sept 2011
107. Kotthaus S, S **Grimmond** Long-term flux observations in London: Examining anthropogenic impact on surface exchange in a dense European city centre 11th EMS Annual Meeting 10th European Conference on Applications of Meteorology, 12 – 16 September 2011, Berlin, Germany
108. **Grimmond** S, L Järvi, A Christen Surface Urban Energy and Water Balance Scheme (SUEWS): Development, Evaluation and Application 11th EMS Annual Meeting 10th European Conference on Applications of Meteorology, 12 – 16 September 2011, Berlin, Germany
109. Wood CR, JF Barlow, S Lane, L Pauscher, M Gouvea, S Kotthaus, H Ward, S **Grimmond** Boundary layer dynamics over London, UK, as observed using doppler lidar and scintillometers. 11th EMS Annual Meeting 10th European Conference on Applications of Meteorology, 12 – 16 September 2011, Berlin, Germany
110. Kotthaus S, J Sae-Jung, M Wooster, CSB **Grimmond** Surface Sensible Heat Flux in London: An application of thermal remote sensing to Urban Climate, NERC/ARSF Meeting Bournemouth, 12 September 2011

111. Lindberg F, S Kottthaus, M Wooster, **CSB Grimm** Characterization of London's vegetation and building morphology: Application of LiDAR data to Urban Climate, NERC/ARSF Meeting Bournemouth, 12 September 2011 (poster)
 112. Wood CR, JF Barlow, S Lane, L Pauscher, M Gouvea, S Kottthaus, H Ward, **S Grimm** Boundary layer dynamics over London, UK, as observed using doppler lidar and scintillometers. International Workshop on Urban Weather and Climate: Observation and Modeling, 12-15 July, 2011, Beijing, China.
 113. Jarvi L, **CSB Grimm**, A Nordbo, H Setälä, M Taka, E Siivola, O Ruth, T Vesala Evaluation of the Surface Urban Energy and Water Balance Scheme (SUEWS) in Helsinki, Annual Meeting: Finnish Centre of Excellence in Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change, Proceedings of the Finnish Center of Excellence and Graduate School in 'Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change', <http://www.atm.helsinki.fi/FAAR/reportseries/rs-126.pdf>, Luosto, Finland, 18- 20 May 2011
 114. Barlow JF, M Gouvea, **S Grimm**, S Kottthaus, S Lane, L Pauscher, H Ward, C Wood *Probing the urban boundary layer using remote sensing: the ACTUAL project*, Royal Meteorological Society Conference 2011, 27-30 June, University of Exeter, Exeter
 115. Ward HC, JG Evans, **CSB Grimm** Comparing bichromatic scintillometry with the two-wavelength method: first results from Chilbolton, 3rd Scintillometer Workshop, Wageningen, The Netherlands, 18-19 April 2011
 116. Gouvea M, L Pauscher L, S Kottthaus, H Ward, F Lindberg, J Evans, C Wood, J Barlow, J Salmond, T Foken, **S Grimm** Initial results from scintillometer measurements at different scales in central London, 3rd Scintillometer Workshop, Wageningen, The Netherlands, 18-19 April 2011 (poster)
 117. Pauscher L, J Salmond, **CSB Grimm**, S Kottthaus, H Ward, T Foken Turbulent sensible heat fluxes in the urban roughness sub-layer derived from displaced beam small aperture scintillometry in London, UK, 3rd Scintillometer Workshop, Wageningen, The Netherlands, 18-19 April 2011 (poster)
 118. **Grimm** S, C Castillo, M Gouvea, S Kottthaus, T Loridan, L Pauscher, P Smith, H Ward, F Lindberg, D Young King's College London research related to ACTUAL:2011, ACTUAL-project annual meeting of project advisory group, ARUP, London, 4 April 2011.
 119. Loridan T, O Jorba, F Lindberg, S Kottthaus, **S Grimm** High resolution simulation of surface heat fluxes from London's Central Activity Zone (CAZ) High Performance Computing – Barcelona Super Computer Seminar, 10 March 2011
- 2010**
120. Loridan T, **CSB Grimm** Anthropogenic heat flux inventory: the LUCY model, 2nd MEGAPOLI Annual Meeting. Hamburg, Germany, 1-2 Nov 2010
 121. Loridan T, **CSB Grimm** The International Urban Energy Balance Models Comparison Project: overview of Phase 1 and 2, 2nd MEGAPOLI Annual Meeting. Hamburg, Germany, 1-2 Nov 2010
 122. Chrysoulakis N, **CSB Grimm**, E Magliulo, R San José, M Jones, Z Mitraka, C Borrego, J Klostermann, M Santamouris Accounting for urban metabolism in urban planning: The FP7 Project BRIDGE, International conference Managing the Urban Rural Interface Strategies & Tools for Urban Development & Sustainable Peri-urban Land Use Relationships 19 – 22 October, 2010, Copenhagen, Denmark
 123. Ward HC, JG Evans, HAR De Bruin, **CSB Grimm** Scintillometry with non-uniform crosswind fields *19th Symposium on Boundary Layers & Turbulence*, August 2–6, 2010 Keystone, Colorado (poster)
 124. Dragoni D, HP Schmid, CA Wayson, **CSB Grimm**, JC Randolph, H Potter Evidence of increased net ecosystem productivity associated with a longer vegetated season in a deciduous forest in south-central Indiana, USA *19th Symposium on Boundary Layers & Turbulence*, August 2–6, 2010 Keystone, Colorado
 125. Grossman-Clarke S, JA Zehnder, T Loridan, **S Grimm** Contribution of Land use changes to near surface air temperatures during recent summer extreme heat events in the Phoenix metropolitan area *9th Symp. Urban Environment*, August 2–6, 2010 Keystone, Colorado, USA (poster)
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140. Grimm S Methodology Specification BRIDGE Progress Meeting, Athens, Greece, 6-7 May 2010
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 227. Su HB, HP Schmid, **CSB Grimm**, C Vogel, PS Curtis. Is flux divergence in the tower layer important in estimating annual NEE using eddy-covariance measurements? 26th Conf. Agric. & Forest Meteor., 23-27 Aug 2004, Vancouver, Canada.
 228. Eliasson I, B Offerle, **CSB Grimm**, S Lindqvist. Wind fields & turbulence statistics in an urban street canyon. 5th Symp. Urban Environment, AMS, 23-27 August 2004, Vancouver, BC, Canada.
 229. Grimm CSB, HB Su, B Offerle, B Crawford, S Scott, V. Anderson, S Zhong, C Clements. Variability of heat fluxes in a suburban area of Oklahoma City. 5th Symp. Urban Environment, AMS, 23-27 August 2004, Vancouver, BC, Canada.
 230. Salmond JA, L Davies, **CSB Grimm**, TR Oke, B Offerle. Analysis of surface controls on carbon dioxide & water vapour fluxes over a Mediterranean city, 5th Symp. Urban Environment, AMS, 23-27 August 2004, Vancouver, BC, Canada.
 231. **Grimm CSB**, JA Salmond, *TR Oke*, B Offerle, A Lemonsu. Flux & turbulence measurements at a densely built-up site in Marseille: heat, mass (water, carbon dioxide) & momentum. 38th CMOS Cong., 31/5 - 4 Jun 2004 Edmonton, Canada.
 232. Walsh CJ, TR Oke, J Salmond, **CSB Grimm**. Fluxes of Atmospheric Carbon Dioxide Over a Suburban Environment: Observations from Vancouver. 38th CMOS Congress, 31 May - 4 June 2004 Edmonton, Alberta, Canada.
 233. Salmond JA, TR Oke, **CSB Grimm**, *SM Roberts*. Analysis of Turbulence in the Urban Boundary Layer at Night. 38th CMOS Congress, 31 May - 4 June 2004 Edmonton, Alberta, Canada.
 234. Fortuniak K, B Offerle, **CSB Grimm**. Slab surface energy balance scheme & its application to parameterisation of the energy fluxes of urban areas. NATO ASI school "Flow & Transport Processes in Complex Obstructed Geometries: from cities & vegetative canopies to industrial problems", Kiev, Ukraine, May 4-15, 2004
 235. Grimm CSB, J. Hom, B Offerle, B Crawford, D Golub, S Scott, M Patterson. Cub Hill – Local Scale Fluxes, BES Science Meeting, Baltimore, MD, April 21 2004.
 236. Fortuniak K, **CSB Grimm**, B Offerle. Application of a slab surface energy balance model to determine surface parameters for urban areas, High-resolution climate modelling: Assessment, added value & applications, WRCP Regional-scale Climate Modelling, Lund, Sweden, 29 March - 2 April 2004. (*poster*)
 237. Grimm CSB, HB Su., B Offerle, B Crawford, S. Scott, S Zhong, C Clements. Variability of sensible heat fluxes in a suburban area of Oklahoma City. 84th Annual Meeting AMS, 8th Symposium on Integrated Observing & Assimilation Systems in the Atmosphere, Oceans & Land Surface & the Symposium on Planning, Nowcasting, & Forecasting in the Urban Zone. Seattle, January 11-15, 2004. [J7.2]
 238. Roberts S, TR Oke, A Lemonsu, **CSB Grimm**. Simulated sensitivity of surface-atmosphere energy exchanges in urban areas. 84th Annual Meeting AMS: Symp. Planning, Nowcasting, & Forecast. in Urban Zone. Seattle, Jan/11-15/04.
 - 2003** (+ 6 presentations with proceedings papers listed)
 239. Roberts S, TR Oke, A Lemonsu, **CSB Grimm**. Modeling urban surface-atmosphere sensible heat exchanges. American Geophysical Union Fall Meeting, 8-12 December 2003.
 240. Grimm CSB, B Offerle, TR Oke. Surface-Atmosphere exchanges in urban areas: observations & models, American Geophysical Union Fall Meeting, 8-12 December 2003.
 241. Hom J, **S Grimm**, D Golub, B Offerle, D Nowak, G Heisler, R Pouyat, W. Zipperer. Studies on carbon flux & carbon dioxide concentrations in a forested region, in suburban Baltimore, Baltimore Ecosystem Study 2003 Annual Meeting, 16-17 October 2003, Baltimore, MD.
 242. Hom J, **S Grimm**, D Golub, B Offerle, D Nowak, G Heisler, R Pouyat, W. Zipperer. Studies on carbon flux & carbon dioxide concentrations in a forested region, in suburban Baltimore, 2003 Long Term Ecological Research Network All Scientists Meeting [LTER ASM], Seattle, WA, 18-21 September, 2003 (*poster*).
 - 243.† Offerle B, **CSB Grimm**, K. Fortuniak, K. Klysik. Heat fluxes from remotely sensed data over Łódź, Poland, 5th International Conference on Urban Climate (ICUC-5), Lodz, Poland, September 1-5, 2003.
 244. Band LE, M Cadenasso, **S Grimm**, M Grove, ST Pickett. Heterogeneity in Urban Ecosystems: Patterns & Process, Ecosystem Function in Heterogeneous Landscapes, Cary Conf., Institute of Ecosystem Studies, Millbrook, NY, 2003.
 245. Roberts S, TR Oke, JA Voogt, **CSB Grimm**, A Lemonsu. Energy storage in a highly developed urban environment, CMOS03, Ottawa, Canada, June 2-5, 2003.
 246. Masson V, A Lemonsu, J Noilhan, P Durand, G Pigeon, T Oke, J Salmond, **S Grimm**, B Offerle, J Voogt. ESCOMPTE-CLU: Énergétique de la canopée urbaine dense. 5th ESCOMPTE Workshop, Toulouse, France 26-28 May 2003 (*poster*).
 247. Lemonsu A, V Masson, **CSB Grimm**. Modelling of the surface energy budget & the Urban Boundary Layer over an old Mediterranean city core. European Geophysical Society, Nice, April 2003.

248. Oliphant AJ, **S Grimm**, HP Schmid, HB Su, S Scott, C Vogel. The role of cloud cover in carbon sequestration dynamics of two mid-western mixed hardwood forests. Association of American Geographers, New Orleans, 4-8 March 2003.
- 2002** (+ 15 presentations with proceedings papers listed)
Oliphant A., **S Grimm**, H Zutter, HP Schmid, HB Su, S Scott, B Bovard. Interannual variability in energy & carbon exchange over a midwestern mixed hardwood deciduous forest. AGU, San Francisco, December 2002. (*poster*)
249. Hom J, **S Grimm**, D Golub, B Offerle. Studies on carbon flux & carbon dioxide concentration in a forested region in suburban Baltimore. USDA Natural Resources Management to Offset Greenhouse Gas Emissions Symp., Raleigh, NC, Nov 19-21 2002.
250. Grimm S, D Nowak, J Walton, M Mitchell, CT Driscoll. Flux-Towers: Studying surface-atmosphere exchanges in urban areas. Environmental Quality Systems Symposium, Syracuse, NY. October 29 & 30, 2002.
251. Schmid HP, **S Grimm**, HB Su, S Pryor, R Barthelmie, B Bovard, S Scott, N Froelich, J Hutton, JC Randolph, C Wayson, J Ehman, A Oliphant, F Rahman. Carbon, energy & radiation fluxes at the Morgan-Monroe State Forest Flux Tower, AmeriFlux Annual Meeting. Boulder, Colorado, October 22-23, 2002 (*poster*).
252. Grimm CSB, J Hom, B Offerle, D Golub. Carbon Dioxide, Energy & Water Fluxes From Cub Hill, Baltimore Suburban Environment, AmeriFlux Annual Meeting. Boulder, Colorado, October 22-23, 2002 (*poster*).
253. Roberts S M, T Oke, J Voogt, **S Grimm**, V Masson. Heat Storage in a European Central City Environment. 4th Urban Environment Symposium, AMS, Norfolk, Virginia, May 2002.
254. Lemonsu A, **CSB Grimm**, V Masson. Validation of the TEB scheme in the city centre of Marseille, France. 4th Urban Environment Symposium, AMS, Norfolk, Virginia, May 2002.
255. Salmond J, TR Oke, **CSB Grimm**. Wavelet analysis of turbulence in the nocturnal boundary layer above a Mediterranean city. 27th General Assembly European Geophysical Society, Nice, France April 2002
256. Grimm CSB, B Offerle, T Oke, K Fortuniak, J Hom, J Salmond, D Golub. New energy & mass flux results from three contrasting urban environments (Marseille, France; Lodz, Poland; & Baltimore, USA). Association of American Geographers, Los Angeles March 2002.
257. Lagouarde JP, M Irvine, **CSB Grimm**, TR Oke. Mesure du flux de chaleur sensible en milieu urbain par scintillométrie LAS. Technical workshop on experimentation & instrumentation Meteo-France, January 2002.
- 2001** (+ 3 presentations with proceedings papers listed)
258. Oliphant AJ, HP Schmid, **CSB Grimm**. Seasonal analysis of spatial variability in radiation components over a deciduous mid-latitude forest. American Geophysical Union, San Francisco, December 2001 (*poster*).
259. Schmid HP, AJ Oliphant, **CSB Grimm**, HB Su, CS. Vogel, SL Scott, PS Curtis. Carbon & energy fluxes over two mid-latitude deciduous forests: inter-annual & latitudinal variations. American Geophysical Union, San Francisco, December 2001 (*poster*).
260. Offerle B, **S Grimm**, T Oke, K Fortuniak, J Hom, J Salmond, D Golub, C Walsh. Energy & CO₂ fluxes from contrasting urban environments (Marseille, France; Lodz, Poland; Baltimore, USA & Vancouver, BC). American Geophysical Union, San Francisco, December 2001 (*poster*).
261. Grimm CSB, B Offerle, J Hom, D Golub. CO₂ & heat flux observations in suburban Baltimore (Cub Hill). AmeriFlux Annual Meeting, Argonne National Labs, Chicago, October 2001. (*poster*)(*talk*)
262. Schmid HP, **CSB Grimm**, F Cropley, AJ Oliphant, SL Scott. Seasonal & interannual variability of net ecosystem exchange of CO₂ over a mid-latitude deciduous forest, DOE TCP all scientist meeting, Argonne Nat. Labs, Chicago, Oct 2001. (*poster*)
263. Hom J, D Golub, **CSB Grimm**, B Offerle. Studies on carbon dioxide & air quality concentration Measurements in the Baltimore Ecosystem Study Baltimore Ecosystem Study Annual Meeting, Baltimore, October 2001.
264. Grimm CSB, B Offerle, J Hom, D Golub. Observations of local-scale heat, water, momentum & CO₂ fluxes at Cub Hill, Baltimore. Baltimore Ecosystem Study Annual Meeting, Baltimore, October 2001.
265. Hom J, D Nowak, D Golub, G Heisler, **S Grimm**, B Offerle, S Scott. Studies on carbon flux in urban forests at the Baltimore Ecosystem Study LTER. Challenges of a changing earth. Global Change open science conference (GCTE), Amsterdam, Netherlands July 9-13, 2001. (*poster*)
266. Grimm CSB, TR Oke, B Offerle, S Meyn. A local-scale urban meteorological parameterization scheme (LUMPS). European Geophysical Society, Nice, France, March 2001.
267. Masson V., **S Grimm**, TR Oke. Evaluation of the Town Energy Budget (TEB) scheme with energy balance & surface temperature measurements in densely built urban areas. European Geophysical Society, Nice, France, March 2001.
268. Schmid HP, **CSB Grimm**, F Cropley, AJ Oliphant, SL Scott. Seasonal & interannual variability of net ecosystem exchange of CO₂ over a mid-latitude deciduous forest, European Geophysical Society, Nice, France, March 2001.
269. Offerle B, **CSB Grimm**, TR Oke, T Newton. Evaluating the seasonality of simple relations for estimating surface net all-wave radiation in urban areas. Association of American Geographers, New York, February 2001.
- 2000** (+ 12 presentations with proceedings papers listed)
270. Grimm CSB, FD Cropley, TS King. Summertime carbon dioxide & ozone fluxes & resistances in a neighborhood of Chicago. Third Urban Environment Symposium, AMS, Davis, California, August 2000.
271. Grimm CSB, P Hanson, HP Schmid, S Wullschlegler, F Cropley, HB. Su, B Offerle, SL Scott. Ecosystem evaporation, transpiration & sub-canopy vapor fluxes at the Morgan Monroe State Forest, Indiana. 24th Conference on Agricultural & Forest Meteorology, AMS, Davis, California, August 2000. (*poster*)
272. Ehman, JL HP Schmid, **CSB Grimm**, JC Randolph, PJ. Hanson, FD Cropley, J Belmont, C Wayson, S Scott, B Offerle, HB Su. A

- preliminary inter-comparison of micrometeorological & ecological estimates of carbon sequestration in Morgan-Monroe State Forest, Ecological Society of America Annual Meeting, Snowbird, Utah, August 2000. (*poster*).
273. Grimmond CSB, TR Oke. A Local-scale Urban Meteorological Parameterization Scheme (LUMPS), Fourth Annual George Mason University Transport & Dispersion Modeling Workshop Fairfax, Virginia, 11 - 13 July 2000.
 274. Grimmond CSB, TR Oke. A comprehensive micrometeorological dataset derived for North American cities. EURASAP workshop on meteorological pre-processing for complex terrain - upscaling, Prague, Czech Rep., June 12-14, 2000.
 275. Oke TR, A Davenport, **S Grimmond**, J Wieringa. A revision to the Davenport roughness classification for cities & sheltered country, 34th Congress of Canadian Meteorological & Oceanographic Society (CMOS), Victoria, BC, May 2000.
 276. Schmid HP, **CSB Grimmond**, F Cropley, SL Scott. Inter-annual variability of energy, vapour & CO₂ exchange over a mid-latitude deciduous forest, European Geophysical Society, Nice, France, April 2000.
 277. Grimmond CSB, TR Oke. Heat fluxes & stability in cities. Association of American Geographers, Pittsburgh, PA. April 2000.
 278. Oke TR, T Newton, **CSB Grimmond**, M Roth. The heat balance of a residential suburb of Miami, Florida. Association of American Geographers, Pittsburgh, Pennsylvania. April 2000.
 279. Schmid HP, **S Grimmond**, F Cropley, HB Su, C Vogel. Measurement & modeling of forest atmosphere exchange & carbon sequestration at two AmeriFlux sites. Association of American Geographers, Pittsburgh, Pennsylvania. April 2000.
 280. Wolfe CP, C Souch, **CSB Grimmond**. Hydroperiods of non-tidal wetlands with contrasting histories of disturbance: examples from the Indiana Dunes National Lakeshore. Geol. Soc. Amer. North-Central, Indianapolis, Apr 2000.
 281. Hanson PJ, SD Wullschlegel, KB Wilson, **CSB Grimmond**, HP Schmid. Terrestrial feedbacks to regional hydrologic budgets: A Distributed, Field Measurement Campaign in Support of the GEWEX-GCIP Large Scale Area - East Initiative. GEWEX Continental-Scale International Project (GCIP) Pls Meeting, Potomac, MD, March 2000.
 282. Grimmond CSB, TR Oke. Aerodynamic parameters (z_0 , z_d & r_{am}) in urban areas. 11th Joint Conference on the Applications of Air Pollution Meteorology with the Air & Waste Management Association, AMS, Long Beach, CA January 2000.
- 1999** (+ 3 presentations with proceedings papers listed)
283. Grimmond CSB, TS King, FD Cropley. Fluxes & resistances of heat, water, ozone & carbon dioxide for a neighborhood of Chicago. International Conference on Urban Climate 1999 (ICUC'99) Sydney, Australia, November 1999.
 284. Grimmond S, S Potter, H Zutter, J Schoof, C Souch. Evaluation of an Automated Method for Measuring Sky View Factors in Urban Areas. International Conference on Urban Climate 1999 (ICUC'99) Sydney, Australia, Nov. 1999. (*poster*)
 285. Grimmond CSB, TR Oke. Evapotranspiration in urban areas. *Impacts of Urban Growth on Surface & Ground Waters*. International Association of Hydrological Sciences, Birmingham, England, July 1999.
 286. Grimmond CSB, TR Oke. Rates of evaporation in urban areas. Canadian Association of Geog.-Ontario, McMaster, Oct 1999.
 287. Schmid HP, **CSB Grimmond**, F Cropley, B Offerle, HB Su. Measurements of CO₂ & energy fluxes over a mixed hardwood forest in the Midwestern US. DoE Joint Science Meeting (TCP, PER & NIGEC), Indianapolis, June 1999. (*poster*)
 288. Hunt KD, AJM Cleminson, JM Latham, RI Weiss, **S Grimmond**. A partly habituated community of dry-habitat chimpanzees in the Semliki Valley Wildlife Reserve, Uganda. American Association of Physical Anthropologists Annual Meeting, March 1999. Abstract published: *American J. of Physical Anthropology*, Supp 28, 157.
 289. Oke TR, **CSB Grimmond**, R Spronken-Smith. The assessment of urban effects on climate using urban-rural station pairs: Cautionary notes. European Geophysical Society, The Hague, Netherlands, April 1999.
 290. Oke TR, **Grimmond CSB**. The estimation of urban rugosity. Assoc. British Climatologists. Birmingham, England, April 1999.
 291. Oke TR, **Grimmond CSB**. The estimation of urban rugosity. Europ. Geophysical Soc., The Hague, Netherlands, April 1999.
 292. Grimmond CSB, TS King, F Cropley. Fluxes of heat, water, momentum, ozone, carbon dioxide & other scalars for urban neighborhoods: A methodology & directions for the future. AAG, Honolulu, Hawaii, March 1999.
- 1998** (+ 6 presentations with proceedings papers listed)
293. Brothers TS, B Offerle, **CSB Grimmond**. The impact of fire on vegetation & environment of karst towers, Los Haitises, Dominican Republic Conference of Latin Americanist Geographers, Santa Fe, New Mexico, September 1998.
 294. Grimmond CSB, TR Oke. How rough is a city? AAG, Boston, Massachusetts, March 1998.
 295. Grimmond S, HP Schmid, S Pryor, R Barthelmie, N Shurpali, B Offerle, B Jensen. Energy, mass & momentum exchange above a Midwestern Hardwood Forest. GEWEX-GCIP Mississippi Basin Conference, St Louis, June 1998. (*Poster*)
 296. Grimmond D S, HP Schmid, S Pryor, R Barthelmie, N. Shurpali, B Offerle, B Jensen. Energy, mass & momentum exchange above a Midwestern Hardwood Forest. FLUXNET meeting, Polson, Missouri, June 1998 (*poster*).
 297. Schmid HP, Offerle B, Cropley FC, Su HB, **Grimmond S**. Fluxes of latent heat, sensible heat & carbon dioxide above a Mixed Hardwood Forest in Southern Indiana, 23rd Agric. & Forest Meteorology conf., AMS, Albuquerque, November 1998.
 298. Schmid HP, Barthelmie R, Curtis P, **Grimmond S**, Pryor S, Teeri J. Carbon dioxide exchanges in mixed hardwood forests in the Midwestern United States: Two AmeriFlux Projects. European Geophysical Society, Nice, France, April 1998.
 299. Shurpali N, Schmid HP, Offerle B, **Grimmond S**. Eddy correlation measurements of latent heat, sensible heat & CO₂ fluxes above a mixed hardwood forest in Southern Indiana. GEWEX-GCIP Mississippi Basin Conf., St Louis, June 1998.
- 1997** (+ 1 presentation with proceedings papers listed)
300. Grimmond CSB. Geography & Hydrology, Assoc. of American Geographers, Fort Worth, Texas, April 1997 (panelist).
 301. Grimmond CSB, Schmid HP. Determination of surface roughness parameters accounting for fetch: A sensitivity analysis for urban areas. AMS, 12th Conf. Boundary Layers & Turbulence, Vancouver, British Columbia, July - August 1997.

302. Grimmond CSB, Oke TR. Surface aerodynamic characteristics of urban areas. Third Polish Conference on Urban Climate & Bioclimate, Polish Geophysical Society, Lodz, Poland, October 1997.
303. Grimmond CSB, Oke TR. Urban roughness parameters: morphometric methods. AAG, Forth Worth, Apr 1997.
304. Souch C, **Grimmond CSB**, Wolfe C. Wetland hydrology: Ongoing studies at the Indiana Dunes National Lakeshore. Association of American Geographers, Forth Worth, Texas, April 1997.
305. Soux A., Oke TR, Smith S, **Grimmond CSB**. Garden irrigation & suburban evaporation. AAG, Forth Worth, Texas, April 1997.
- 1996** (+ 1 presentation with proceedings papers listed)
306. Souch C, Wolfe C, **Grimmond CSB**. Evaporation rates from wetlands with different disturbance histories. Association of American Geographers, Charlotte, North Carolina, April 1996.
307. Grimmond CSB, Oke TR, Spronken-Smith R, Jauregui E, Souch C, Newton T, King TS, Voogt J, Hubble MD. Heat storage in North American cities. Assoc. of American Geographers, Charlotte, North Carolina, April 1996.
308. Grimmond CSB, Oke TR, Spronken-Smith R, Jauregui E, Souch C, Newton T, King TS, Demanes M, Voogt J, Hubble MD. Local scale heat storage in North American cities. Canadian Meteorological & Oceanographic Society, Toronto, May 1996.
309. Grimmond CSB, King TS. Measured urban surface resistances/conductances to water vapor transport. International Conference on Urban Climatology 96. Essen, Germany, June 10-14, 1996.
310. Grimmond CSB, Oke TR, Spronken-Smith R, Jauregui E, Souch C, Newton T, King TS, Demanes M, Voogt J, Hubble MD. Local scale heat storage in North American cities. International Conference on Urban Climatology 96. Essen, Germany, June 10-14, 1996.
311. Oke TR, Smith S, Soux A, **Grimmond CSB**. The impact of garden irrigation upon suburban evaporation. International Conference on Urban Climatology 96. Essen, Germany, June 10-14, 1996.
312. Jauregui E, Spronken-Smith R, Oke TR, **Grimmond S**, Tejeda A, Barradas V. Recent energy balance observations in Mexico City. International Conference on Urban Climatology 96. Essen, Germany, June 10-14, 1996.
313. Slusher RB, Whitehead DR, Robeson SM, **Grimmond CSB**. The effects of within-site microclimatic variation & local weather patterns on the reproductive success of the Acadian Flycatcher (*Empidonax virens*). Ecological Society of America 1996 Annual Combined Meeting, Providence, Rhode Island, August 10-14, 1996. (poster).
314. Souch C, **Grimmond CSB**, Wolfe C. Evaporation rates from wetlands with different disturbance histories. AGU, San Francisco, Dec 1996.
315. Grimmond CSB, Oke TR, Soux A, Smith S. Suburban evaporation rates. AGU, San Francisco, Dec 1996.
- 1995** (+ 3 presentations with proceedings papers listed)
316. Souch C, Wolfe C, **Grimmond CSB**. Wetland evaporation rates: Indiana Dunes National Lakeshore. AAG, Chicago, Mar 1995.
317. Southworth J, **Grimmond CSB**. Variation of stomatal resistances within urban areas. Association of American Geographers, Chicago, Illinois. March 1995.
318. King TS, **Grimmond CSB**, Nowak DJ. Eddy correlation determination of local-scale energy & pollutant fluxes in Chicago. Association of American Geographers, Chicago, Illinois. March 1995.
319. Hubble M, **Grimmond CSB**. Intercomparison of energy balance fluxes for two neighborhoods with differing tree cover: San Gabriel Valley, Los Angeles, California. Association of American Geographers, Chicago, Illinois. March 1995
- 1994** (+ 2 presentations with proceedings papers listed)
320. Heisler GM, **Grimmond CSB**, Grant RH, Souch C. Modeling tree & building effects on the microclimate in residential areas. AAG, San Francisco, California, April 1994.
321. Grimmond S. Local scale surface resistance to water vapor transport for urban areas. Association of American Geographers, San Francisco, California, April 1994.
322. Grimmond CSB, Oke TR. Comparison of heat fluxes from summertime observations in the suburbs of four North American cities. Canadian Association of Geographers, Wilfred Laurier University, Waterloo, Ontario, May 1994.
323. Wolfe CP, Willard DE, Olyphant GL, Whitman RL, **Grimmond CSB**, Stewart PM. Wetland hydrology & vegetation in the Great Marsh, Indiana Dunes National Lakeshore. 15th Annual Meeting of the Society of Wetland Scientists, Portland, Oregon, June 1994.
324. Grimmond CSB, Oke TR. Comparison of heat fluxes from summertime observations in the suburbs of four North American cities. Canadian Meteorological & Oceanographic Society, Ottawa, June 1994.
- 1993**
325. Demanes M, **Grimmond S**. The use of a source area model with a surface database to determine the influence of urban morphology on surface energy balance exchanges. AAG, Atlanta, Georgia, April 1993.
326. Mattix M, **Grimmond S**. Implications of using a net all-wave radiation sub-model in the estimation of urban evapotranspiration. Association of American Geographers, Atlanta, Georgia, April 1993.
327. Grimmond S, Souch C, Heisler G. The Chicago Urban Forest Climate Project: An overview & preliminary results. AAG, Atlanta, April 1993.
328. Cleugh HA, **Grimmond CSB**. A comparison between measurements of local-scale 'suburban' & areally-averaged 'urban' heat & water vapour fluxes. International Association of Hydrological Sciences/ International Association of Meteorology & Atmospheric Physics, Symposium 93. J3.1 "Exchange processes at the land surface for a range of space & time scales" for the Yokohama Assembly. Yokohama, Japan, July 1993.
329. Grimmond CSB, Oke TR, Cleugh HA. Intercomparison of observed suburban & rural, irrigated & unirrigated, energy balance fluxes, Sacramento, California. International Association of Hydrological Sciences/ International Association of Meteorology &

- Atmospheric Physics, Symposium 93.J3.1 "Exchange processes at the land surface for a range of space & time scales" for the Yokohama Assembly. Yokohama, Japan, July 1993.
330. Grimmond CSB. Dynamically determined parameters for urban energy & water exchange modelling. Second International Conference/Workshop on Integrating GIS & Environmental Modelling, Breckenridge, Colorado, Sep 26-30, 1993.
331. Grimmond CSB. Field Instrumentation in Climate & Meteorology courses. Association of American Geographers, West Lakes Meeting, Milwaukee, Wisconsin, October 7-9, 1993 (poster).
- 1992**
332. Arnfield AJ, **Grimmond S**. Preliminary investigation of urban canyon hysteresis behavior & implications for storage heat flux modeling. Association of American Geographers, San Diego, California, April 1992.
333. Oke TR, **Grimmond S**. Suburban-rural energy balances & the heat island of a hot dry city, AAG, San Diego, April 1992.
334. Grimmond S. An evaluation of an urban evaporation-interception model in a hot, dry city. AAG, San Diego, April 1992.
335. Arnfield AJ, **Grimmond S**. An urban canyon energy budget model & its applications to urban storage. Pre-Congress meeting of the International Geographical Union, Commission on Climatology, University Park, PA, August 4-7, 1992.
336. Mattix M, **Grimmond S**. Modelling solar radiation for use in an evapotranspiration-interception model. CIC Conference on Women in Science & Engineering, Indiana University, Bloomington, Indiana, October 1992 (poster).
- 1991** (+ 1 presentation with proceedings papers listed)
337. Grimmond CSB, Belding MJ, Isard S. Evaluation of two continuously weighing mini-lysimeters, AAG, Miami, April 1991.
- 1990** (+ 1 presentation with proceedings papers listed)
338. Schmid HP, Cleugh HA, **Grimmond CSB**, Oke TR. Spatial variability of energy fluxes in suburban terrain. European Geophysical Society, XV General Assembly, Workshop on Physical, Chemical & Biological Processes in the Atmospheric Boundary Layer, Copenhagen, DK, 23-27 April 1990. (Abstracts in *Annales Geophysicae*, 1990)
339. Grimmond S, Oke TR. An evapotranspiration-interception model for urban areas. AAG, Toronto, Ontario, Canada, 1990.
- 1989**
340. Grimmond CSB, Oke TR. Urban storage heat flux. Association of American Geographers, Baltimore, Maryland, U.S.A., 1989.
341. Grimmond S, Oke TR. An evapotranspiration-interception model for urban areas. International Federation for Housing & Planning (IFHB)/ International Council for Building Research (CIB)/ World Meteorological Organization (WMO) International Conference on Urban Climate, Planning & Building, Kyoto, Japan, November 1989.
- 1988** (1 presentation with proceedings papers listed)
- 1987**
342. Oke TR, Cleugh HA, **Grimmond S**. On the evaluation of evapotranspiration from urban areas. AAG, Portland, 1987.
- 1985** (1 presentation with proceedings papers listed)
- 1984**
343. Grimmond CSB. Assessment of a suburban water balance - a model. U Washington - U British Columbia Hydrology Conference, Seattle, Washington, U.S.A., 1984.
- 1983**
344. Grimmond CSB. Assessment of a suburban water balance - methods. CMOS Congress, Banff, Alberta, Canada, 1983.
345. Grimmond CSB. Assessment of a suburban water balance - results. CAG Congress, Winnipeg, Manitoba, Canada, 1983.

Teaching

Manuals/Materials

- Grimmond CSB & C Souch 2001: Geography 109: Weather & Climate. Manual for Continuing Studies, Indiana University (distance learning course).
- Grimmond CSB, C Souch & HP Schmid 1996: Geography 109 Web site (ongoing revisions & updates)
<http://www.indiana.edu/~geog109/> [Major revision 2000]. Revised each semester through Fall 2004
- Grimmond CSB 1995: G350 Climatological Instrumentation & Field Methods Manual. Collegiate Copies. Spring 1995, 96, 97
- Grimmond S, C Souch. Weather & Climate Laboratory Manual G109. Climate & Meteorology Program, Indiana Univ., 102 pp. Collegiate Copies. Editions: Fall 1990, Spring 1991, Fall 1991, Fall 1992, Spring 1993, Fall 1993, Spring 1994, Fall 1994, Spring 1995, Fall 1995, Spring 1996, Fall 1996, Spring 1997, Fall 1998, Spring 1999, Spring 2000, Summer 2000, Fall 2000
- Grimmond S 1992: "Weather or Not" Science Olympiad. Workshop materials. December 1992.

TEACHING GRANTS (external see main grants)

Indiana University

- 2004 Commitment to Excellence program in Environmental & Ecological Sciences *Installation of a network of environmentally critical monitoring sites within the Griffy Woods Research & Teaching Preserve (GWRTP) linked by telecommunication equipment for continuous data access* C Brown, B Douglas, **S Grimmond**, Sally Letsinger, Greg Oliphant, Hans Peter Schmid \$54,110
- 2002-03 Research & University Graduate School Undergraduate Research & Creative Activity Partnership Award: Reiko

- Toriumi CO₂ & Heat fluxes in a Urban Area: Surface Characteristics of Source Area
- 2001-02 Research & University Graduate School Undergraduate Research & Creative Activity Partnership Award: Kathy Corbin *Soil moisture variability in the MMSF*
- 2001-02 Research & University Graduate School Undergraduate Research & Creative Activity Partnership Award: Ben Crawford *Scale model measurements of anthropogenic heat fluxes from a building*
- 2000-01 Research & University Graduate School Undergraduate Research & Creative Activity Partnership Award: Laura Ciasto. *Evaluation of a simple energy balance model over a Midwestern deciduous forest*
- 1999-01 School of Continuing Studies, *Development of a correspondence version of Geography 109: Weather & Climate*
- 1997-98 School of Continuing Studies & Wisdom Tools. *Development of an on-line version of Geography 109: Weather & Climate*
- 1997 Research & University Graduate School Undergraduate Research & Creative Activity Partnership Award: Jason Moore. *Evaluation of temperature sensors in a forest environment*
- 1996 ICT Instructional Course Development Grant to Enhance Active Learning: *Structured integration of real-time meteorological data into Geography 109: Weather & Climate*
- 1995 Research & University Graduate School Undergraduate Research & Creative Activity Partnership Award: Neal Schroeder. *Hydrology of an urbanizing catchment*
- 1993 Honor's Division Award to G350 Class to attend Association of American Geographers, West Lakes Meeting, Milwaukee, Wisconsin. \$800.
AAG, West Lakes Meeting, Milwaukee, Wisconsin, Oct., 1993.
Projects initiated in Field Methods & Climatological Instrumentation (G350 Spring 1993).
Gray CJ, C Cooley, T Williams 1993: *Observations of springtime urban heat island phenomena in Bloomington, Indiana.*
Hodgkiss R, S Chapple, J Stapinski 1993: *The microclimate effect of underground heating pipes.*
Johnson A., G Lotkowski, J Miller 1993: *The effect of incoming shortwave radiation & temperature on the interior climate of a building.*

Graduate Student Awards (external to IU, KCL)

- 2012 Simone Kotthaus ICUC8, ICUC/AMS Student conference presentation award, Dublin August 2-8, 2012
- 2012 Simone Kotthaus EPSRC Bridging the Gap Summer Studentship award (KCL/UCL)
- 2010 Thomas Loridan High Performance Computing (HPC)-Europa2 Transnational Access Award to Barcelona Super Computer Centre (6 weeks)
- 2010 Simone Kotthaus 9th Symp. Urban Environment, August 2010, Keystone, Colorado, USA Best Poster Award
- 2006/7 Vasilis Pappas Monash University: KCL/Monash Travel Award
- 2006 Valerie Anderson, AMS, 6th Urban Environment Symposium February 2006 Best Poster Award
- 2004 Ben Crawford: UCGIS Summer Assembly Scholarship to attend the GIScience 2004 conference based on submitted paper
Ben Crawford: UCGIS Best Poster Runner-up, GIScience 2004 conference
- 2003 Brian Offerle: Oral & Poster award, 5th International Conference on Urban Climate Łódź, Poland.
Ben Crawford: Poster award, 5th International Conference on Urban Climate Łódź, Poland

2013 Professor, University of Reading

- UoR, Dept Meteorology
2014-15 MT371/MT49E *Boundary Layer Meteorology (Part 2)*
Masters Project (17-21 Feb 2014) James Shaw, John Lally, Elizabeth Ehrbar, Emily McKie
UoR, CENDUM Urban Meteorology *Urban Energy balance (2 h lecture, 15 Oct 2013)*
King's College London, 6SSG3061 Current Research *Urban Meteorology: State of the art measurements (4 h, 16 & 23 Oct 2013)*

2006 Professor, King's College London (enrollments)

- 7SSG5177 Global Environmental Change 2: Present and Future 2013 [20%]
6SSG3060 Current Research *Urban Meteorology: State of the art measurements (4 h) 2012, 2013*
- 5SSG2053 Geographical Concepts Skills and Methods II: Global Environmental Issues 2010/11 [12 tutees, 1 lecture, Course Coordinator Part 4-50% of course]
- 7SSG5157 Earth's Changing C Cycle 2010 [10%]
Independent Geographical Study 2012/13 [3]

(IGS)	2010/11 [3: Liam Dartnell, William Knott, Oliver Lister] 2009/10 [3: James Ingram, Dana Galiyeva, Eugene Boyle] 2008/9 [3: Phil Kilgour, Deveka Makwana, Zehra Chudry] 2007/8 [5: Jinal Patel, Reena Patel, Manreet Randhawa, Pru Robinson, Clare Woodcock] 2006/7 [4: Abu Ebrahimsa, Rafia Khan, Rob Larman, Katie Munitz]
SG5111 Environmental Research Design & Application	2006 [2: Alessandra Sala, Duick Young]; 2007 [1 Sunday Fayanju]; 2008 [1: Ross Casey]; 2010 [2: Ruhana Begum; Katy Francis]
SG3055 Urban Climatology	2006 [22, 100%]; 2007 [25, 100%]; 2008 [80%]; 2009 [80%]; 2010 [15, 70,] 2012
SG5141/SG5145 Understanding & Managing the Urban Atmosphere	2006 [5, 50%]; 2007 [50%]; 2008 [80%]; 2009 [80%]; 2010 [15, 80%], 2012
SG5035 Monitoring Environmental Change	2006 [9, 50%], 2007 [50%], 2008 [50%], 2009 [100%], 2010 [20, 50%], 2012 [, 25%]
SG2045 Researching Geography	2006/7 [14 tutees], 2007/8 [12 tutees, 1 lecture], 2008/9 [6 tutees, 1 lecture], 2008/9 [12 tutees, 1 lecture, Course Coordinator]

2001 Professor, Indiana University (enrollments)

Fall 2005	G250/577 Computer Methods in Geography (25)
Summer 2005	G460 Geography Internship (2)
Spring 2005	G350/G550: Instrumentation & field methods in Atmospheric Science (14) G840: Readings in Geography (1)
Fall 2004	G440/G540: Physical Geography of the City (10)
Spring 2003	G501: Research Problems in Geography II (4) G350 Instrumentation & field methods in Atmospheric Sciences (8) G460 Geography Internship (2)
Fall 2002	G500: Research Problems in Geography I (4) G109 Weather & Climate (175) G560: Geography Internship (1)
Spring 2002	G501: Research Problems in Geography II (6) G109 Weather & Climate (165) G460 Geography Internship (2)
Fall 2001	G500: Research Problems in Geography I (7) G477/G577: Advanced Climatology & Meteorology, G602 Seminar in Atmospheric Science: <i>Urban Meteorology</i> (9)

Invited Graduate Courses

Politecnico di Milano, Italy (Doctoral programme in Building Systems Engineering)

2008 Microclimate – Physics & Design of Building & Environmental Micro-systems: *Urban Climatology - Characterization of the Urban Heat Island (measurement & data analysis)*, October 2008

Göteborg University, Sweden

2009	Local & Micro Scale Climatology – theory & field measurements, May 2009
2003	Application of Micrometeorological Theory in the Context of an Urban Canyon, November 2003
2000	The Urban Energy Balance, September 2000.
1997	Instrumentation & Field Methods in Atmospheric Science, October 1997

1995-01 Associate Professor, Indiana University [enrollments]

G109 Weather & Climate	Fall 1995 (120), Fall 1996 (105), Spring 1997 (140), Spring 1999 (140), Spring 2000 (160), Fall 2000 (175)
G109 Weather & Climate Honors Lab	Fall 1995 (12), Fall 1996 (8), Spring 1997 (13), Spring 1999 (8)
G235 Introduction to Geographic Methods	Fall 1998 (30)
G350 Climatological instrumentation & field methods	Spring 1997 - intensive writing [IW] (13), Spring 1999 -IW (10), Spring 2001 - IW (10)
G400/G460 Internship in Geography	Fall 1995 (3), Summer 1997 (1), Fall 1997 (1), Spring 2001
G405 Hydroclimatology	Fall 1996 (6), Fall 1998 (5)
G440/G540 Topics in Environmental Geography: Physical Environment of the City	Fall 1999 (9)
G450 Undergraduate Research	Fall 1995 (1), Summer 1997 (1), Summer 1999 (1), Spring 2001 (1)
G460 Internship in Geography	Spring 2001 (1)
G470 Micrometeorology & Physical Climatology	Fall 1995 (12)

G477 Advanced Climatology & Meteorology	Summer 1999 (1)
G500 Research Problems in Geography I	Fall 1999 (5), Fall 2000 (11),
G501 Research Problems in Geography II	Spring 2000 (4), Spring 2001 (8)
G602 Graduate seminar in Climatology: Urban Micrometeorology	Fall 1995 (3)
G830 Readings in Geography	Fall 1995 (1), Fall 1996 (1), Spring 1997 (1)
G840 Research in Geography	Spring 2000 (1)

1989-95 Assistant Professor, Indiana University

G109 Weather & Climate	Spring 1989, Fall 1989, Spring 1990, Fall 1990, Spring 1991, Fall 1992, Spring 1993, Fall 1993, Spring 1994, Fall 1994
G304 Meteorology & Physical Climatology	Fall 1991, Spring 1992
G350 Climatological instrumentation & field methods	Fall 1991, Spring 1993, Spring 1995 - intensive writing
G400 Internship in Geography	Summer 1991, Summer 1992, Summer 1995
G405 Hydroclimatology	Fall 1990, Fall 1992, Spring 1994
G450 Undergraduate research	Summer 1991, Summer 1993, Fall 1993
G470 Micrometeorology & Physical Climatology I	Fall 1989, Spring 1992, Fall 1993
G470 Micrometeorology II	Spring 1990
G572 Advanced Climatological Instrumentation	Fall 1995
G802 Mathematical Modelling in Climatology	Spring 1991, Spring 1994
G830 Readings in Geography	Summer 1991, Fall 1991, Spring 1992
G840 Research in Geography	Fall 1990, Spring 1993, Spring 1994

1981-88 Teaching Assistant, University of British Columbia.

Hydrology (G205), Climatology (G212), Physiography (G213), Forest & Agricultural Meteorology (G214), Hydrology (G303), Micrometeorology (G311), Environment & resources (G366) Aerial Photography (G370), Urban Meteorology (G411).
Occasional lectures to Micrometeorology (G311), Urban Meteorology (G411), Physical Environment of the City (G417), & Proseminar in Physical Geography (G500).

1980-81 Demonstrator, Department of Geography, University of Otago.

Intermediate Physical & Human Geography laboratories & tutorials. Advanced I (Second year) Physical & Human Geography laboratories. Second & third year Hydrology, Climatology & Meteorology labs, field trips & climate station. Field School

GRADUATE SUPERVISION

CHAIR

MSc Complex Systems Modelling - From Biomedical and Natural to Economic and Social Sciences (Mathematics KCL)
Sheron B 2012-13 *A Global Carbon Dioxide Flux Model of Variable Scale and Resolution*

M.Sc. Physics (KCL)

Mustchin J 2012-13 *Scintillometry in the Urban Environment of London: comparison of three models* (Distinction)

M.Sc. Carbon: Science, Society & Change (KCL)

Simon T 2010-11 *A Green-up Model for London's Urban Vegetation for Predicting Future Phenology Change*

Hardinges J 2009-10 *A Viability Assessment on the Installation of a Building Mounted Wind Turbine at a Central London Site*

M.Sc. Sustainable Cities (KCL)

Webster T 2009-10 *Green Roofs: Steps towards increasing the application of research to support policy*

Ma A 2008-09 *An investigation into the potential carbon savings from the implementation of aquifer thermal energy storage within the King's College London Strand campus site.*

Fitzmaurice W 2007-08 *Knowledge exchange at the Science-Practice interface: a case study of a local climate impacts profile for an outer London Borough* (Distinction)

M.Sc. Global Environmental Science (KCL)

Aquilar Varela R 2012-13 *An assessment of possible factors contributing to the decline of bees in Mexico with a focus on neonicotinoids and other pesticides harmful to bees*

Tsairidi E	2010-11	<i>The Surface Urban Energy and Water Balance Scheme (SUEWS): An application of the model in the Municipality of Egaleo, Athens, Greece.</i>
M.Sc. EMMM (KCL)		
Parsons J	2012-13	<i>Modelling the impact of land cover change in the London street environment using SUEWS</i>
Durrans, J	2011-12	<i>Mobile measurements of CO₂ in London from a mobile, mounted platform (Distinction)</i>
Brace S	2010-11	<i>Examining the spatial and temporal relationship between urban heat islands and impervious surface land cover: A case study of London</i>
Ingram J	2010-11	<i>Modelling incoming solar radiation : parameterization of cloud and aerosol transmission coefficients for London (Distinction) (PhD Imperial)</i>
Minns J	2010-11	<i>An assessment of seasonal and diurnal CO₂ fluxes in central London with Wytham Woods (Distinction)</i>
DeJong M	2009-10	<i>The Air Quality Benefits of Decarbonising the Road Transport Sector: A Case Study in London, UK (Distinction) (ERG/KCL)</i>
Robinson P	2009-10	<i>The London Meteorological Monitoring Network (RA, MIT)</i>
McCormack N	2008-09	<i>Wind Energy in London</i>
Allan L	2008-09	<i>Modelling anthropogenic heat flux in urban areas (Distinction) (RGS/IBG)</i>
Charles A	2008-09	<i>CO₂ fluxes in central London: the roles of sources & sinks</i>
Ortiz J	2008-09	<i>Evaporation modeling in the urban model intercomparison</i>
Neupane M	2007-08	<i>Urban Water Demand Under Future Climate Conditions in Oakridge, Vancouver, Canada. A Modelling Approach</i>
Fayanju S	2007-08	<i>Rainfall variability & reliability in Nigeria</i>
Oladimeji M	2007-08	<i>Air quality modelling in a multiparty industrial complex using CALPUFF & ISC</i>
Thomas M	2007-08	<i>Visualisation & analysis of spatial variability of atmospheric temperature in London</i>
Young D	2006-07	<i>Mixing Layer Height Determination over Urban Roughness: A Comparative Study (Distinction)</i>
Sala A	2006-07	<i>Large aperture scintillometry applied in urban areas. Case study: London (UK).</i>
Faridian J	2006	<i>The impact of high-reflectance roofing materials on ambient air temperatures at various neighbourhood scales in Philadelphia, USA</i>
Prieto-Lopez T	2006	<i>An implementation of the Local-scale urban meteorological parameterizations scheme (LUMPS) at a suburban site (PhD Birmingham)</i>
M.S. Geography (IU)		
Anderson V	2004-08	<i>The comparability of storage heat flux models by common datasets: results from suburban North America (PhD U. Chicago)</i>
Crawford B	2003-07	<i>Carbon dioxide fluxes in a suburban area of Baltimore, MD (PhD U British Colombia)</i>
Zutter H	1999-01	<i>Convective boundary layer over a mid-latitude deciduous forest</i>
Potter S	1996-00	<i>Sky View Factor Estimation [and Tropospheric Ozone Analysis in Urban Areas of Central Indiana]</i>
M.A. Geography (IU)		
Southworth J	1992-96	<i>Controls on urban stomatal resistances: Los Angeles Metropolitan Area</i>
Belding MJ	1989-91	<i>Evaluation of the performance of mini-lysimeters. Did not complete</i>
Rowe M	1989-92	<i>Controls on micro & local scale surface energy balance fluxes: Posey County, Indiana</i>
M.A. Geography / M.S.E.S.(IU)		
Demanis M	1991-95	<i>Surface & atmospheric controls on local-scale energy balance fluxes for Chicago & Sacramento.</i>
Mattix M	1991-94	<i>The impact of clouds on shortwave & longwave radiation.</i>
Ph.D. Meteorology (UoR)		
<i>PhD monitoring committee (Chair)</i>		
Gough Hannah	2013-	<i>The impact of urban microclimate on indoor-outdoor air exchange [Supervisors: Barlow/Luo (SCME)]</i>
<i>PhD monitoring committee (Member)</i>		
Webber Chris	2013-	<i>Linking pollution, meteorology and climate change [Supervisors: Dacre/ Collins]</i>
Ph.D. Geography (KCL)		
Bjorkgren A [M]	7/2010	<i>Micro and Local-scale Carbon dioxide exchanges Supported by NERC (PT)</i>
Best M	9/2009-	<i>Urban Land surface modeling: evaluation of different approaches Supported by Met Office (PT)</i>

Ward H	9/09-7/13	<i>Energy, water and carbon fluxes in the suburban environment</i> Supported by NERC/CEH Defense July 2013
Kotthaus S	3/2009-	<i>Surface and atmospheric controls on energy exchanges in a dense city centre</i> Supported by EUF7 Submitted July 2013, Defense Nov 2013 (leave of absence for 6 months)
Young D	1/2009-11	Supported by EUF7 (leave of absence (9/2009-)) Did not complete
Loridan T	2/2008-11/2011	<i>Evaluation and developments to urban land surface modelling: offline and online</i> Supported by NSF (PT, then FT) Defense November 2011
Gouvea M	1/2008-	Supported by KCL SSPP/UK Met Office Did not complete
<i>Ph.D. Geography (IU)</i>		
Offerle B	1/00-03	<i>The energy balance of an urban area: examining temporal & spatial variability through measurements, remote sensing & modeling</i> <i>Candidacy: October 2001 Defense: September 2003</i>
Hubble M	1993-95	<i>Snowmelt in urban areas. Did not complete</i>
King TS	1994-96	<i>Surface resistance to ozone, carbon dioxide, heat & water in urban areas. Did not complete</i>

Postdoctoral (KCL)

Dou, J	4/12-	(Chinese Meteorological Administration)
Castillo C	12/10-12/11	(Tokyo Institute of Technology)
Järvi L	11/09-11/10	(Helsinki University)
Lindberg F	3/09-6/10	Funded by Formas, Sweden (Goteborg Univ)
Blackett M	1/08-12/09	Urban Surface Energy Balance Model Comparison (UK Met Office) (KCL)

Postdoctoral (IU)

Dragoni D	2003-08	<i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest (Cornell).</i>
Bovard B	2002-03	<i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest (Duke). Now visiting Assistant Professor Florida International University</i>
Oliphant A	2000-02	<i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest (Canterbury, New Zealand) Now Assistant Professor San Francisco State Univ.</i>
Yukhno S	2000-01	Junior Faculty Development Program, American Councils for International Education, Ukraine
Borne K	1999-00	<i>Stomatal resistances in urban areas (Göteborg, Sweden).</i>
Cropley F	1998-00	<i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest (Cranfield Institute of Technology, England).</i>
Shurpali N	1997-98	<i>Measurements of fluxes & concentrations of CO₂ in & over a Deciduous Forest in the Midwest (Nebraska, USA).</i>

COMMITTEE MEMBER

M.S. Geography (IU)

Deng B	2003-06	<i>A Mechanistic Model to Fill the Data Gaps in Water Vapor Flux</i>
Doty J	2001-03	<i>Multi-sensor Analysis of Land-Surface Temperature of a Deciduous Forest Using Satellite & Tower-Based Data</i>
Froelich N	2000-03	<i>An Investigation of mean vertical velocities & gully flows at Morgan Monroe State Forest.</i>
Villani G	1999-02	<i>Turbulence & diffusion in & over a forest canopy: measurements & modeling</i>
Schoof J	1997-99	<i>Synoptic circulation classification & downscaling for the Midwestern United States</i>

M.A. Geography (IU)

Shein K	1993-95	<i>Wind speed variability in the Midwestern US 1961-1990: Implications for wind power assessment.</i>
O'Neal M	1991-94	<i>Vegetation-climate interactions at meso-scales for the Midwest region of North America.</i>
Fitch M	1989-93	<i>Mesoscale vortices over the Pacific & Indian Ocean sectors of Antarctica</i>
Kahrs J	1989-93	<i>A synoptic climatology of polar lows over central North America during the winter half year.</i>
DeGrand J	1989-91	<i>A satellite-derived mid-season climatology of jet condensation trails: April 1977 - October 1979</i>
Berlin C	1989-90	<i>A satellite climatology of the south pacific cloud band & related synoptic extratropical cyclone activity</i>
Micuda T	1989-90	<i>Variability of the Palmer Drought Severity Index (PDSI) over the southeast US Between 1947-1986: Ocean-atmosphere interactions</i>
Perry M	1989-90	<i>A satellite climatology of mesoscale convective systems for the Southwestern United States</i>
Brinegar R	1989-90	<i>Land surface - atmosphere interactions & the persistence of drought for the midwest United States</i>

M.S./M.S.E.S.(IU)

Slusher B	1994-97	<i>Neotropical migrant birds & climate in the Hoosier National Forest (Biology/SPEA)</i>
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Ph.D.		
Prieto-Lopez, T		(Geography, University of Birmingham)
Burns P	2011	(Physics, University Hertfordshire)
Priestman M	2011-	(ERG, KCL)
Paolini R	2010-11	Urban Envelope: Thermal Influence Of Built Environment Surfaces On Urban Microclimate Politecnico Di Milano
Riddick S	2008-	(Geography) Upgrade (2009)
Smith T	2008-	(Geography) Upgrade (2010)
Barratt B	2006	An assessment of the effectiveness of air quality management schemes in London (ERG, SBHS)(Upgrade)

Ph.D. (IU) Geography unless indicated

Sato N	2004-06	Comprehensives
Froelich N	2003-09	Modeling of thermotopographic flows in forested terrain
Heynen N	2000-02	The ecological ramifications of urban restructuring to social justice in Indianapolis, Indiana
Hutton J	2000-08	Transport & chemical processing of isoprene in a northern hardwood forest.
Ehman J	1996-01	Ecological estimates of Carbon sequestration in a mid-latitude deciduous forest (SPEA)
Johnston J	1995-01	Multi-scaled modeling of net primary productivity in a temperate deciduous forest (SPEA)
Janis M	1994-00	Confounding Climatic Change: The Problem of Spatially Unrepresentative Air Temperature Records
Cordel B	1992-	The effects of an in-service science/math workshop on teachers' attitudes & self-efficacy toward science & students' attitude towards science (Science Education)
Wolfe C	1991-99	Ecological Assessment of a Dune Swale Wetland on the Southern Shore of Lake Michigan. (SPEA)
Travis D	1990-94	The radiative effects of, & atmospheric controls on, jet contrails analyzed from digital satellite data.

Ph.D. Minor advisor

		(IU) Area
Arnold D.	1990-94	Surface water hydrology
Travis D.	1990-94	Field methods & instrumentation

Postdoctoral (IU)

Su HB	1998-00	Measurements of fluxes & concentrations of CO ₂ in & over Deciduous Forests in the Midwest (California Davis, USA)
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UNDERGRADUATE STUDENT RESEARCH SUPERVISION

King's College London

Independent Geographical Studies

Lim, Tzu Ling	2012-13	The urban heat island and it's effect on London's precipitation patterns
Hayashi, Kayo	2012-13	Change in urban form and its implications on urban climate- case study in City of London
Morrison, William	2012-13	Estimating Urban Heat Fluxes from Surface Temperature Observations
Knott, William	2010-11	LiDAR: An application for measuring urban vegetation parameters? A London case study
Lister, Oliver	2010-11	What is the current area and potential future extent of green roofs in London's Central Activities Zone?
Dartnell, Liam	2010-11	Can surface temperature data obtained from MODIS satellite imagery be used to estimate part of the complete urban surface temperature?
Ingram, James	2009-10	Radiation transmission
Boyle, Eugene	2009-10	Air pollution
Gaylieva, Dana	2009-10	Wind energy
Chudry, Zehra	2008-9	An Urban Oven: the influence of urban design on micro-scale air temperature in Faisalabad, Pakistan
Kilgour, Phil	2008-9	Investigate the climatology of carbon dioxide (CO ₂) concentrations in the city of London & give an explanation for the variability over an annual study [sic]
Makwana, Deveka	2008-9	A comparison of cloud cover detection over London via two methods
Patel, Jinal	2007-8	Variations in the residential water balance: 2003-2007
Patel, Reena	2007-8	The Influence of Cloud Cover on Ultraviolet Radiation Irradiance
Randhawa, Manreet	2007-8	Human comfort in London Underground Victoria line
Robinson, Pru	2007-8	The impacts of the Congestion Charge Zone on air quality in London

Woodcock, Clare	2007-8	<i>Assessing the potential role & value of urban forests in London in reducing atmospheric carbon dioxide levels</i>
Ebrahimsa, Abu	2006-7	<i>Ozone in London</i>
Khan, Rafia	2006-7	<i>Evaporation in urban gardens</i>
Larman, Rob	2006-7	<i>Hedgerows & borders of fields impact on biodiversity</i>
Munitz, Katie	2006-7	<i>Vegetation & soil differences in Gibraltar & Spain</i>

Indiana University

Undergraduate Research Partnership –see Teaching Grants (above) B.S.E.S.

Zutter H	1999	<i>Evaluation & application of automated methods to measure sky view factors for urban areas</i>
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B.S. Physics (senior thesis)

Toriumi R	2003	<i>Urban Surface characteristics for turbulent source areas: calculation of roughness length under neutral conditions</i>
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Undergraduate Research Assistants

Monroe Country Rainfall Runoff	Nathan Langwald	Jake Irwin	Justin Wood	Ryan Alyward	
Baltimore MMSF	Ben Crawford Kathy Corbin Daniel Kojetin Nathan Langwald Ryan Aylward	Reiko Toriumi Ben Crawford Laura Ciasto Reiko Toriumi Jake Irwin	Nick Solga Shane Hubbard Jessica Howe Maggie Barnes Kevin Sayers	Jennifer Klippel Todd Barnell Noah Benjamin Andrea Lammers Jason Moore	Matt Seavitt Heidi Zutter Catherine Wade
Hoosier National Forest	Justin Schoof	Meg Swindal			Mark McKee
Chicago/LA	Melanie Roy Emily Freeman (Mississippi State Univ)	Cass Gray	Amy Johnson Dallas Dishman (IUPUI)	Beth Hall	

TEACHING PRESENTATIONS/PANELS

2004	"Climate" Fostering Freshman Environmental Literacy: A Faculty Seminar, (invited talk)
1996	The Center for Excellence in Education Forum, "Teaching with Technology: What do we gain? What do we lose?" Invited Participant
1996	ISS/UCS Teaching & Learning Technologies Lab, "Teaching with the Web", TLTL Faculty Round table, Invited Panelist
1995	Teaching Resources Center, "Women Teaching, Teaching Women" Invited Member of Panel

SERVICE

KING'S COLLEGE LONDON

Department of Geography

2012-	Postgraduate and Research Committee (PARC), member
2012-	Deputy Chair, Research Committee (REF)
2009-11	Acting Head of Department on numerous occasions (short periods)
2009-11	Chair, Postgraduate Research Board of Studies, Member of Department Executive Committee
2008-09	Ph.D. Admissions Tutor
2007-10	Mentor Dr David Moore
2006-08	Deputy Ph.D. Admissions Tutor
2006-	Appraisal Reviewer; Promotions Committee
2006-07	Member of Strategic Committee

SSPP

2006	Admissions Committee (Ph.D.)
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University

2007-	Environmental Research Group Management Board
2006-	KCL Lead Contact for Affiliation to National Centre for Atmospheric Sciences (NCAS) NERC

INDIANA UNIVERSITY

DEPARTMENT OF GEOGRAPHY

1999-03 Director Graduate Program
1994-03 Director Atmospheric Science Program (prior to 1999: Climate & Meteorology Program)

2002 Member job description & search committee for Grant writer
2000-02 Member of the Publicity Committee
1999-00 Member Salary Committee
1999- Member Departmental Honors, Awards & Fellowships Committee
1999-01 Member Undergraduate Committee
1999-00 Member Space Management Committee
1999-05 Mentor Assistant Professor Tom Evans
1998-99 Member Equipment & computer planning committee
1998-99 Member Graduate advisory committee
1998-99 Member Strategic/Vision planning committee
1998 Member Pre-Tenure Review Committee of Sara Pryor
1998 Member Pre-Tenure Review Committee of Hans Peter Schmid
1996-97 Co-chair Departmental Publicity Committee
1995-97 Chair Colloquium & Visiting Speaker Committee
1995-96 Member Salary Committee
1995 Member Pre-Tenure Review Committee of Scott Robeson
1995 Coordinator for Climatology Faculty Positions Interviews: Assistant & Associate/Full
1994-97 Member of Library Committee
1992-93 Member Salary Committee
1992 Member Graduate Fellowship Committee
1991-97 Member Space Management Committee (Chair 1993-97)
1991-97 Member of Undergraduate Program Committee
1991-93 Member Climatology Curriculum Committee (Chair 1991/92)
1991-92 Member Strategic/Long Range Planning Committee
1991 Coordinator Science Careers Fest
1990-97 Member Graduate advisory committee
1990-91 Member Graduate recruitment committee & Graduate advisory committee
1990-91 Member Search & Screen Committee for Climatologist
1990-91 Coordinator Climatology Caucus
1990 Faculty Coordinator - Geography awareness week - Physical Geography
1989-97 Member Equipment & computer planning committee
1989-93 Supervision of the operation of Dept Geography climate station
1989-91 Supervision of the operation of Westinghouse climate station
1989-91 Member Colloquia & visiting speaker committee

College of Arts & Sciences

2005 Member COAS Salary Review Committee
2001-03 Member COAS Promotion Committee
1997 Member COAS Dissertation Year Fellowship Committee
1996 Member COAS Strategic Directions Proposal Review Panel
1991 Member of the Committee for Core Curriculum in Physical & Life sciences (COAS)

University

2004-05 Member MSB –II Site Selection Committee; Member MSB –II Planning Committee
2003 Member Planning Committee for Multi-discipline Science Building II
2002-03 Member President's Informal Advisory Council
2002 Member Multi-discipline Science Building (MSB) Design Committee
2001-05 Mentor Lingling Chen (Assistant Professor, Biology)
2001-03 Graduate Council, Awards & Financial Aid Committee
2001-04 Elected member, Graduate Council
2000-02 Member Steering Committee for a Multi-discipline Science Building
1999 Reviewer for School of Continuing Studies (Geography 109 Weather & Climate)
1999- Member UITS Student Technology Centers Advisory Committee
1995-97 Interdisciplinary Atmospheric Science Email List & Seminar Coordinator
1995-96 Member IU Strategic Directions Council
1995-96 Member Research & Univ Graduate School, Undergrad. Research & Creative Partnership committee

1995 Science Olympiad Examiner - National - 'Experimental Design'
 1995 Member Strategic Directions Task Force for Minority Attainment
 1994- Member COAS/SPEA working group to develop & administer BS. Environmental Science.
 1993-94 Member of Program Committee, Bloomington Chapter of Association for Women in Science/ Women in Science & Mathematics Project
 1993 Speaker, Indiana University Red Carpet day
 1990-94 Science Olympiad Examiner - Regional & State - 'Weather or Not'
 1990-94 Weather Screen on Academic Information Environment (AIE) on the University Computing System (UCS) with Graduate Students.
 1990-92 Indiana University Audio-Visual Center, selection department, reviewer
 1992 IU Team member to CIC Conference on Women in Science & Engineering. Organizer of tours of campus scientific facilities for CIC Conference on Women in Science & Engineering, October 1992.
 1991 Member University Computing Service Textural Processing Committee
 1990 Member University Computing Service Graphics Applications Committee

COMMUNITY & PUBLIC

Book Interview/article: *Primary Editions*, October 1994
 Television interview: KUAT-TV, June 1990, Arizona
 Radio: WFIU Moment of Science - review of scripts
 Newspaper interview/article: The Los Angeles Times, August 1, 1993; July 21, 1994; Sept 22, 1995
 Voice of America; Columbus Dispatch; Miami Herald (February 1996), Indianapolis Star (August 2000).
 Magazine interview/article: *Earth, Panorama (Italy) 2000*
 Advisor to: IndyGreen, Indianapolis

NATIONAL & INTERNATIONAL

Chair

2011 3rd iLEAPS Science Conference, Garmisch-Partenkirchen, Germany, 18-23 September 2011, Student Poster competition Chair
 2007-10 External Examiner, U Birmingham, M.Sc. Applied Meteorology & Climatology
 2005-10 Lead, Expert Team 4.4 Urban & Building Climatology, World Meteorological Organization (WMO) Commission for Climatology (CCI)
 2003-05 Lead, Expert Team 3.9 (OPAG 3) Urban Climatology including Training, World Meteorological Organization (WMO) Commission for Climatology (CCI) (*invited*)
 2003-06 President, International Association of Urban Climate (*elected*)
 2003 Co-chair Atmospheric Dynamics for "Meteorological aspects of air quality prediction Workshop" US Weather Research Program (*invited*)
 2002-03 President Elect, International Association of Urban Climate
 1999-02 American Meteorological Society, Chair Board on the Urban Environment
 1997-00 American Meteorological Society, Chair Committee on Biometeorology & Aerobiology
 1994-99 International Society of Biometeorology, Co-chair Urban Climate & Air Quality Study Group.
 1996-00 International Urban Climate Email List Coordinator

Member

2013-14 7 th International Scientific Conference on the Global Energy and Water Cycle (World Forum, The Hague, The Netherlands 14-17 July 2014 <http://gewex.org/2014conf/home.html> (Scientific committee: *Modeling anthropogenic impacts in land surface models*)
 2013-16 AMS Fellows Committee, USA
 2011- Shanghai International Meteorological Advisory Committee
 2011- Steering committee, NEON Urban Ecology Working Group, USA
 2011-12 German Excellence Initiative, *Deutsche Forschungsgemeinschaft* (German Research Foundation, DFG) and the *Wissenschaftsrat* (Council for Science and Humanities) Institutional Strategies Review Panel
 2011 Research Council for Natural Sciences and Engineering at the Academy of Finland, Atmospheric Sciences and Geophysics Panel Member
 2011 International Workshop on Urban Weather and Climate: Observation and Modeling (Chinese Meteorological Administration/ American Meteorological Society); International Scientific Committee
 2010 Member UK Climate Change Risk Assessment: London Workshop (Defra)
 2010 Ad-Hoc steering Group Member Defra/AEA Air Quality Data Management & Integration System Scoping Study
 2010 WMO Commission for Climatology Open Panels of CCI Experts (OPACE) member (nominated by UK)
 2009- EPSRC funded project: ACTUAL (Advanced Climate Technology Urban Atmospheric Laboratory) advisory board

2009- UK National Ecosystem Assessment, Urban Chapter contributor
2009- Working Group on Communicating Monitoring & Action on Climate Change (COMACC), GLOBE UK (The Global Legislators Organization).
2007-10 Cost-728 Enhancing meso-scale meteorological modelling capabilities for air pollution & dispersion applications, UK representative Management Committee, Working Group Member
2007- Air Pollution Research in London (APRIL) Committee Member
2007-10 GURME Shanghai project, Member Scientific Steering Committee
2005- International Scientific & Advisory Committee of the Urban Air Quality Conferences
2005- WMO GAW (Global Atmosphere Watch) Urban Research Meteorology & Environment (GURME) Training Team
2005- Joint Action Group for Atmospheric Transport & Diffusion Test Beds (JAG/ATDT) under the Office of the Federal Coordinator for Meteorological Services & Supporting Research (OFCM) Working Group for Environmental Support for Homeland Security (WG/ESHS)
2004-06 Applied Climatology reviewer, *Progress in Physical Geography*
2004 Subject Matter Expert, Office of the Federal Coordinator for Meteorology (OFCM) Joint Action Group for the Atmospheric Transport & Diffusion Modeling (Research & Development Plan) JAG/ATD (R&DP).
2002-03 Expert Team 3.9 (OPAG 3) Urban Climatology including Training, World Meteorological Organization (WMO) Commission for Climatology (CCL)
2001-02 U.S. Weather Research Program (NOAA, NSF, DOD, ASA) Prospectus Development Team 11 (USWRP-PDT-11): Meteorological aspects of air quality prediction
2001-04 Association of American Geographers, Article Awards Committee
2000-03 Clark Atlantic University, Earth System Science Program Advisory Council (NASA/NOAA)
2000-03 International Association for Urban Climate, Elected Member of Board
1998-99 American Meteorological Society, Member of selection committee for Walter Orr Roberts Lecturer
1995-97 National Science Foundation, Geography & Regional Science, Member Review Panel for Dissertation Awards
1994-97 American Meteorological Society, Member Committee on Biometeorology & Aerobiology
1994-95 Association of American Geographers 1995 Annual Conference, Member Program Committee
1994-97 Association of American Geographers, Climate Specialty Group, Member Student Award Committee
1994-06 Association for Women Geoscientists Speakers Bureau, Listed Speaker

Journal Boards

2012-14 *Urban Climate*, Editorial Board member
2012-14 *Journal of Atmospheric and Oceanic Technology*, Editor
2008-11 *Advances in Meteorology*, Editorial Board member
2007-10 *Agricultural & Forest Meteorology*, Editorial Board member
2005-07 *Geography Compass*, Section Editor for Climatology
2001- *Journal of Applied Meteorology*, Associate Editor
2003- *IAUC Newsletter*, Editorial Board member
1996-99 *Annals of the Association of American Geographers*, Editorial Board member

Conferences organized (Chair)

2009 Sustainable Urban Planning in London, Meeting of the BRIDGE researchers & London experts Community of Practice (CoP), August 24th 2009
2007-09 American Meteorological Society 2009 Annual Meeting, Co-chair whole meeting: 'Urban Weather & Climate' (Invited by President-elect of AMS: Walt Dabberdt)
2008 World Meteorological Organization, Expert Team 4.4 Urban & Building Climatology, Geneva, Switzerland, July 28-29, 2008
2005 World Meteorological Organization, Expert Team 3.9 Urban Climatology including Training, Geneva, Switzerland, May 23-25, 2005
2004-06 AMS 2006 Annual Meeting for Cross-cutting theme "Managing Our Physical & Natural Resources" Co Chair (Steve Hanna, Atlanta, GA 29 Jan-2 Feb, 2006 (Invited by President-elect of AMS: Walt Lyons)
2003-06 International Conference for Urban Climate (ICUC6), President of IAUC
2000-02 Amer. Meteor. Soc. 4th Symp. Urban Environment Norfolk, VA, Co-Program Chair.
1999-00 Amer. Meteor. Soc. 3rd Symp. Urban Environment Davis, CA, Program Chair.
1997-98 Amer. Meteor. Soc. 2nd Symp. Urban Environment Albuquerque, NM Program Chair.

Conferences organized (Committee member)

2004-05 UN World Conference on Disaster Reduction Session on "Reducing Risks in Urban Areas: Lessons Learned & Coming Challenges" under Thematic Cluster 2, 18-22 January 2005, Kobe, Hyogo, Japan (WMO/IAUC)
2002-04 American Meteorological Society 2004 Annual Meeting

- 2002-03 Fourth International Conference on Urban Air Quality - Measurement, Modelling & Management 25-28 March 2003, Charles University Prague, Czech Republic: International Scientific & Advisory Committee
- 2002-03 International Association for Urban Climate, 5th ICUC, Łódź, Poland Conference: Local Organizing Committee; International Scientific Committee
- 1997-99 International Conference on Urban Climate 1999 (ICUC'99) Sydney, Australia: Intern. Organizing Committee; International Scientific Committee
- 1995-96 Amer. Meteor. Soc., Member Program Committee for 12th Conf on Biometeorology & Aerobiology, 77th Annual American Meteorological Society Conference

Conference sessions organized

- 2004 Baltimore Ecosystem Study LTER Science Meeting -- Cub Hill, April 21, 2004.
- 2002 Assoc. Amer. Geographers Annual Conf, Los Angeles, Mar 2002. 3 sessions: Surface-Atmosphere Interactions
- 2000 Assoc. Amer. Geographers Annual Conf, Pittsburgh, PA, Apr 2000. 4 Sessions: Physical Geog. of Urban Areas.
- 1999 Assoc. Amer. Geographers Annual Conf, Honolulu, Hawaii, March 1999. Urban climate session
- 1996 Amer. Meteor. Soc. Biometeorology & Aerobiology Conf., Atlanta, GA, Jan 1996. Two Urban Met sessions
- 1995 Assoc. Amer. Geographers Annual Conf, Chicago, Illinois, March 1995. Two Urban Climate sessions
- 1992 Assoc. Amer. Geographers Annual Conf, San Diego, California, April 1992. I: Urban Energy Balance; II: UHI

Conference invited participant (only those attended are listed)

- 2005 Helsinki Urban Modeling Workshop, Helsinki Mesoscale Testbed, Vaisala Oyj & the Finnish Meteorological Institute, Helsinki, Finland June 2005
Co-leader "Microscale- & physical-modeling group: what processes to simulate; what parameters needed; what observations needed (in situ, remote, GIS), how to link to mesoscale models"
- 2005 Joint Action Group for Atmospheric Transport & Diffusion Test Beds (JAG/ATDT), May 11, 2005 OFCM, Silver Springs, Maryland
- 2002 UCAR/NSF Workshop on a Design for a Prototype CitySat: Imaging Regional Urban/Industrial Environmental Footprints, Boulder, Colorado, August 2002.
- 2002 Ecological processes in urban ecosystems: Toward an international synthesis, IGBP-GCTE Focus 1, Global Change & Terrestrial Ecosystems Meeting, Salt Lake City, Utah, July 2002.
- 2001 US Weather Research Program (USWRP) Prospectus Development Team (PDT-11) "Critical meteorological issues related to the prediction of air quality" Palm Springs, California, November 2001.
- 1999 Bridging the Climate Information Gap, Argonne National Laboratory, Illinois, September 1999.
- 1992 National Acid Precipitation Assessment Program workshop: "The urban perspective of acid rain", Raleigh, North Carolina, September 1992.

Journal Referee

Advances in Atmospheric Sciences	J. of Applied Meteorology [and Climatology]
Advances in Science and Research	J. of Arid Environments
Agricultural & Forest Meteorology	J. of Atmospheric & Oceanic Technology
Annals of the Assoc of American Geographers	J. of Environmental Informatics
Atmosfera	J. of Geography
Atmospheric Chemistry & Physics [Discussions]	J. of Geophysical Research – Atmospheres
Atmospheric Environment [- Urban Atmosphere]	J. of Geophysical Research - Biogeosciences
Atmospheric Science Letters	J. of Environmental Informatics
Biogeosciences Discussion	J. of Hydrology
Boundary Layer Meteorology	J. of Hydrometeorology
Bulletin of American Meteorological Society	J. of Infrastructure Systems
Climate Research	J. of Urban Technology
Energy & Buildings	Meteorology & Atmospheric Physics
Environmental Fluid Mechanics	Meteorological Applications
Environmental Monitoring and Assessment	Monthly Weather Review
Environmental Pollution	Physical Geography
Environmental Technology	Quarterly J. of the Royal Meteorological Society
Geofisica Internacional	Remote Sensing & the Environment
Geographical & Environmental Modelling	Scientific Online Letters on the Atmosphere
Global Change Biology	Theoretical & Applied Climatology
Hydrological Processes	Urban Ecosystems
Internet J. of Urban Climate	Water Resources Bulletin
International J. of Climatology	Water Resources Research

Chapter Review

IPCC Working Group II Fourth Assessment:
Chapter 7: Industry, Settlement & Society
Chapter 14: North America

US Climate Change Science Program (CCSP) Synthesis & Assessment Product.
Chapter 14: Human Settlements & the North American Carbon Cycle

Research Paper Referee

Florida Solar Energy Center Lawrence Berkeley Laboratory US Dept Agriculture Forest Service

Book Reviews

American Meteorological Society

Text Books Reviewed for Publishers

Lee X, Massman W, Law B 2004: Handbook of Micrometeorology Kluwer [Prospectus]
Ahrens CD 1991: *Meteorology Today*, West Publishers, St Paul, MN.
Gedzelman SD 1980: *The Science & Wonders of the Atmosphere & The Dynamic Atmosphere*, Wiley, NY (in 1994)
Scorer, R 1999. *Pollution Weather*, Wiley-Praxis, Chichester. [Prospectus]

Web Content Review

American Institute of Biological Sciences www.actionbioscience.org
ESPERE - Environmental Science Published for Everyone Round the Earth

External Research Proposals & Reports Reviewed

Academy of Finland Research Council for Natural Sciences
and Engineering
AXA
Austrian Science Fund (FWF)
Canadian Foundation for Climate & Atmospheric Sciences
(CFCAS-FSCSA)
Canada Natural Sciences & Engineering Research Council
(NSERC)
City University of Hong Kong
Croucher Foundation Hong Kong
*Deutsche Forschungsgemeinschaft (German Research
Foundation, DFG)*
European Facility for Airborne Research (EUFAR)
Hong Kong Research Grants Council
Kuwait Foundation for the Advancement of Science
MONTS (NSF)

National Aeronautics & Space Administration (NASA)
National University of Singapore
Netherlands Organisation for Scientific Research (NWO),
Technology Foundation (STW)
Swiss National Science Foundation
U.K. Engineering & Physical Sciences Research Council
(EPSRC)
U.K. National Environmental Research Council (NERC)
U.S. National Science Foundation (NSF): Biological
Sciences; Chemical Oceanography; Geography & Reg
Science; Hydrologic Sciences; Physical Meteorology
U.S. National Academy of Sciences/NRC
U.S. Dept Energy: National Institute Global &
Environmental Change (NIGEC)
U.S. Man & the Biosphere
University Grants Committee of Hong Kong

Research Proposals Comments Requested

Southern California Edison, Rosemead, CA

Florida Solar Energy Center, Cape Canaveral, Florida.

External Examiner

2007-10 School of Geography, Earth & Environmental Science U Birmingham
MSc Applied Meteorology & Climatology

External Ph.D. Examiner

(Disciplines: Earth Sciences, Environmental Science, Meteorology/Physics)
U Melbourne, Australia (1)
Universite Paul Sabatier-Toulouse, France (2)
Imperial College London, UK (2)

External (Faculty) Promotion/Tenure/Reappointment Reviewer, Visa

(Disciplines: Architecture, Atmospheric Science, Civil and Environmental Engineering, Environmental Science, Forestry,
Geography, Climate and Global Dynamics, Industrial Science, International Development Engineering, Mechanical

Arizona State University, USA (1x, 2013)
Beit Berl College (2013)
Ben-Gurion U the Negev, Israel (2x)
CSIRO, Australia (2 x)
NCAR, USA (1x, 2013)
Macquarie University, Australia
McMaster University, Canada (2x)
National University of Singapore
University College Dublin, Ireland
The U Auckland, New Zealand
U Birmingham, UK (1x, 2012)
U Canterbury, New Zealand (2013)

U Colorado, Boulder, USA
U Georgia, USA (2x)
U Kansas, USA
U Kebangsaan Malaysia, Malaysia
U Oklahoma, USA
U Reading, UK (1x, 2012)
Princeton University, USA (2x, 2013)
The U Tokyo, Japan
Tokyo Institute of Technology, Japan
Utah State University, USA
Yale University, USA

MEMBERSHIPS

American Geophysical Union
American Meteorological Society (*elected Fellow 2006*)
Association of American Geographers (AAG) (past)
European Geosciences Union (EGU) (past)
Indiana Urban Forest Council (past)

International Association of Hydrological Sciences
International Association for Urban Climate
International Society of Biometeorology (past)
Royal Meteorological Society (Fellow)
Sigma Xi (past)

FIELD EXPERIENCE

¶, §, µ Ph.D., MS, or undergraduate student, respectively, when work was conducted NSERC, AES funding to Oke.
Basic: radiation fluxes, soil heat flux, temperature, relative humidity, wind speed, direction, precipitation etc; EC – 3-d
sonic, momentum, turbulence, sensible & latent heat flux using eddy covariance techniques; EC1-d one dimensional
sonic & latent heat; IRT – infra-red thermometry; Open or Closed – open or closed path IRGA infra red gas analyzer.

2013- London: Islington, City of London: embrace

2011- London: Ceilometers NERC ClearfLO

2011 – 13 **London: North Kensington:** Scintillometry, with Lukas Pauscher, Paul Smith Funding: NERC

2010 – **London:** BT tower- Guy's Hospital: Scintillometry with Mariana Gouvea Funding: Met Office, KCL

2008, 2010 – **London:** Flight lines Funding: NERC, ARSF

Publications: Lindberg and Grimmond (2010, 2011)

2006 - **London: King's College,** Ceilometry, Eddy Covariance, Scintillometry, IRT, Basic Funding: EU7 BRIDGE, NERC
ClearfLo, KCL

Publications: Loridan et al. (in review), Kotthaus & Grimmond (in review)

IGS: Makwana, Ingram,

Masters: Young, Sala

Courses: 2010/11: All Science Master students visited site, Monitoring Environmental Change

2006-7: **London: BT tower** With: Eiko Nemitz (CEH, Edinburgh), Janet Barlow (Reading), Vasilis Pappas (KCL), Alastair Reynolds (KCL)

Publications: Helfter et al. (2011); Wood et al. (2010)

3/2005- **Monroe County Rainfall Runoff (MCRR) Bloomington, IN** With: Jack Wittman (MCDB), Kelly Caylor (I), Steve Scott (I), Angela Martin (I, Valerie Anderson § (I), Bin Deng ¶ (I), Nate Langwald µ (I), Jake Irvin µ (I), Justin Wood µ (I) Funding: USGS/IWRRC

7/2003: **Joint Urban 2003 Oklahoma City, OK** with Hong Bing Su (I), Ben Crawford §/µ (I), Steve Scott (I), Sharon Zhong (H), Craig Clements¶ (H) Funding: DTRA/DOE

Publications: Loridan and Grimmond (2011) JAMC

Thesis: Anderson

2/2003 **Ouagadougou, Burkina Faso** with Brian Offerle¶ (I), Ingegard Eliason (Gothenburg), Pelle Jonson¶ (Gothenburg), Local support: DNM EC3d, Basic, IRT, Funding: NSF, IU PCIP

Publication: Offerle et al. (2005), Loridan and Grimmond (2011)

2001 **Escompte Marseille, France** with Brian Offerle¶ (I), Tim Oke (BC), James Voogt (WO), Sarah Roberts§ (BC) Jenny Salmond ¶ (BC) EC3d, Basic, open IRGA CO₂ fluxes, IRT, Funding: Escompte, PNTS, NSF, NSERC, CFCAS

Publications: Grimmond et al. 2004, Salmond et al. (2005), Mestayer et al. (2004), Lagouarde et al. (2006), Loridan et al. (2010)

2001-06 **BES Baltimore, MD, USA** with :Brian Offerle¶ (I), Steve Scott (I), John Hom (USDA FS), Dan Golub (USDA FS), EC3d,

Basic, open IRGA CO₂ fluxes Funding: USDA FS, NSF
 Publications: Loridan et al. (2010), Crawford et al. (2011)
 Theses: Crawford (IU), Preto-Lopez (2006, KCL)

11/2000-02 **Lodz, Poland** with Brian Offerle (I), Krzysztof Fortuniak (L), Prof. Kazimierz Klysik (L), EC3d, Basic, open IRGA CO₂ fluxes Funded: NSF, NATO, IU PCIP, UL

10/2000 **Salt Lake City**, UT, Michael Brown (LANL), Sky View Factor Funded: LANL

2/1998→ **Morgan Monroe State Forest**, IN with Hans Peter Schmid (plus many others) EC3d, Basic, closed IRGA CO₂ fluxes Funded: NIGEC
 Publications: Schmid et al. (2000)
 Thesis: Heidi Zutter§, Boundary layer profiles

1998-00 **Bloomington**, IN, with Sean Potter§ (IU), Heidi Zutter^u (I), Sky View Factor
 Publication: Grimmond et al. (2000)

1995 **Miami**, FL, with T Oke (BC), Trevor Newton§ (BC), Andres Soux^u (BC), Mark Hubble¶ (I); Basic, EC1d, EC3d Funded: NSERC (Oke)

1995 **Chicago**, IL, USA with Tom King¶ (I), EC3d, EC1d, Basic, closed IRGA CO₂ & O₃ fluxes Funded: USDA FS

1994 **Chicago**, IL, USA with Tom King¶ (I), EC3d, EC1d, Basic, closed IRGA CO₂ & O₃ fluxes Funded: USDA FS

1994 **Arcadia & San Gabriel, LA**, CA, with Mark Hubble¶ (I), Tom King¶ (I), EC1d, EC3d, closed IRGA CO₂ Fluxes, Long term Basic, IRT Funded: SCE, USDA FS
 Publication: Grimmond et al. 1996; Grimmond and Oke (1995, 2002)

1993 **Mexico City** with: Dr Ernesto Jauregui (UNAM), Prof Tim Oke (BC), Rachel Spronken-Smith¶ (BC), EC1d, Basic Funded: NSERC (Oke)
 Publication: Oke et al. (1999)

1993 Arcadia, **Los Angeles**, CA, with Mark Demanes§ (I), Jane Southworth§ (IU), Michele Mattix§ (I), Long term Basic EC1d, IRT Funded: SCE, USDA FS
 Publication: Grimmond and Oke (1995, 2002)

1992 **Vancouver**, BC, with Tim Oke (BC), Rachel Spronken-Smith¶ (BC), James Voogt¶ (BC), Basic, EC1d, Boundary layer profiles Funded: NSERC (Oke), IU
 Publication: Voogt and Grimmond (2000), Grimmond and Oke (2002)

1992 **Chicago** with Dr Catherine Souch (IUPUI) Long term Basic, EC1d, Funded: USDA FS

1991 **Sacramento**, CA with Helen Cleugh (CSIRO). Tim Oke (BC), Rachel Spronken-Smith¶ (BC), James Voogt¶ (BC), Mark Belding¶ (I), Dallas Dishman^u (I), Boundary layer profiles, Basic, EC1d, IRT Funded: NSERC (Oke), IU

1990 **Bloomington**, IN with Mark Belding§ (I) Lysimetry Funded: NSF
 Publication: Grimmond et al. (1992)

1990 **Tucson**, AZ, USA with Rachel Spronken-Smith¶ (BC), Basic, EC1d, IRT Funded: USDA FS
 Publication: Grimmond and Oke (1995)

1987 **Vancouver** (PhD); Basic, Bowen ratio
 Publication: Grimmond and Oke (1991), Grimmond et al. (1991), Grimmond (1992)

1986 **Vancouver** (PhD), BC Lysimetry

1982 **Vancouver** (Master) Basic, Water balance
 Publications: Grimmond et al. (1986), Grimmond and Oke (1986)

March 27, 2014