PROF  Roth, Matthias

Dept of Geography, ARTS & SOC SC

Total Publications: 159

Journal Article (52)

49 Authored

1 Meili N; Manoli G; Burlando P; Bou-Zeid E; Chow WTL; Coutts AM; Daly E; Nice KA; Roth M; Tapper NJ (2020)
An urban ecohydrological model to quantify the effect of vegetation on urban climate and hydrology (UT&C v1.0)
Geoscientific Model Development Vol. 13 (1) pp. 335 - 362
10.5194/gmd-13-335-2020

2 Yang Y; Zheng Z; Yim SYL; Roth M; Ren G; Gao Z; Wang T; Li Q; Shi C; Ning G (2020)
PM$_{2.5}$ Pollution Modulates Wintertime Urban Heat Island Intensity in the Beijing-Tianjin-Hebei Megalopolis, China
Geophysical Research Letters Vol. 47 (1)
10.1029/2019GL084288

3 Simon-Moral A; Dipankar A; Roth M; Sanchez C; Velasco E; Huang X-Y (2019)
Application of MORUSES single-layer urban canopy model in a tropical city: Results from Singapore
QUARTERLY JOURNAL OF THE ROYAL METEOROLOGICAL SOCIETY (22 pages)
Publisher: WILEY
10.1002/qj.3694

4 Harshan S; Roth M; Velasco E; Demuzere M (2018)
Evaluation of an urban land surface scheme over a tropical suburban neighborhood
Theoretical and Applied Climatology Vol. 133 (3-4) pp. 867 - 886
10.1007/s00704-017-2221-7

5 Seow MXC; Roth M (2018)
Influence of climate oscillations on urban and rural temperature variability in the Kanto region of Japan
Climate Research Vol. 75 (1) pp. 65 - 80
10.3354/cr01507

6 Middel A; Lukaszyck J; Maciejewski R; Demuzere M; Roth M (2018)
Sky View Factor footprints for urban climate modeling
Urban Climate Vol. 25 pp. 120 - 134
10.1016/j.uclim.2018.05.004

7 Liu X; Li X-X; Harshan S; Roth M; Velasco E (2017)
Evaluation of an urban canopy model in a tropical city: the role of tree evapotranspiration
ENVIRONMENTAL RESEARCH LETTERS Vol. 12 (9) (12 pages)
Publisher: IOP PUBLISHING LTD
10.1088/1748-9326/aa7ee7

8 Roth M; Lim VH (2017)
Evaluation of canopy-layer air and mean radiant temperature simulations by a microclimate model over a tropical residential neighbourhood
BUILDING AND ENVIRONMENT Vol. 112 pp. 177 - 189 (13 pages)
Publisher: PERGAMON-ELSEVIER SCIENCE LTD
17 Bueno B; Roth M; Norford L; Li R (2014)
Computationally efficient prediction of canopy level urban air temperature at the neighbourhood scale
Urban Climate Vol. 9 pp. 35 - 53
10.1016/j.uclim.2014.05.005

18 Li X-X; Koh T-Y; Entekhabi D; Roth M; Panda J; Norford LK (2013)
A multi-resolution ensemble study of a tropical urban environment and its interactions with the background regional atmosphere
JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES Vol. 118 (17) pp. 9804 - 9818 (15 pages)
Publisher: AMER GEOPHYSICAL UNION
10.1002/jgrd.50795

19 Velasco E; Roth M; Tan SH; Quak M; Nabarro SDA; Norford L (2013)
The role of vegetation in the CO2 flux from a tropical urban neighbourhood
ATMOSPHERIC CHEMISTRY AND PHYSICS Vol. 13 (20) pp. 10185 - 10202 (18 pages)
Publisher: COPERNICUS GESELLSCHAFT MBH
10.5194/acp-13-10185-2013

20 Roth M; Chow WTL (2012)
A historical review and assessment of urban heat island research in Singapore
SINGAPORE JOURNAL OF TROPICAL GEOGRAPHY Vol. 33 (3) pp. 381 - 397 (17 pages)
Publisher: WILEY-BLACKWELL
10.1111/sjtg.12003

21 Salmond JA; Roth M; Oke TR; Christen A; Voogt JA (2012)
Can Surface-Cover Tiles Be Summed to Give Neighborhood Fluxes in Cities?
JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY Vol. 51 (1) pp. 133 - 149 (17 pages)
Publisher: AMER METEOROLOGICAL SOC
10.1175/JAMC-D-11-078.1

22 Quah AKL; Roth M (2012)
Diurnal and weekly variation of anthropogenic heat emissions in a tropical city, Singapore
ATMOSPHERIC ENVIRONMENT Vol. 46 pp. 92 - 103 (12 pages)
Publisher: PERGAMON-ELSEVIER SCIENCE LTD
10.1016/j.atmosenv.2011.10.015

23 Velasco E; Roth M (2012)
Review of Singapore's air quality and greenhouse gas emissions: Current situation and opportunities
Publisher: TAYLOR & FRANCIS INC
10.1080/10962247.2012.666513

24 Koh T-Y; Bhatt BC; Cheung KKW; Teo CK; Lee YH; Roth M; Purnawirman (2012)
Using the spectral scaling exponent for validation of quantitative precipitation forecasts
METEOROLOGY AND ATMOSPHERIC PHYSICS Vol. 115 (1-2) pp. 35 - 45 (11 pages)
Publisher: SPRINGER WIEN
10.1007/s00703-011-0166-4

25 Roth M; Emmanuel R; Ichinose T; Salmond J (2011)
Velasco E; Roth M (2010) Cities as net sources of CO<sub>2</sub>: Review of atmospheric CO<sub>2</sub> exchange in urban environments measured by eddy covariance technique
Geography Compass Vol. 4 (9) pp. 1238 - 1259
10.1111/j.1749-8198.2010.00384.x

Grimmond CSB; Roth M; Oke TR; Au YC; Best M; Betts R; Carmichael G; Cleugh H; Dabberdt W; Emmanuel R (2010) Climate and More Sustainable Cities: Climate Information for Improved Planning and Management of Cities (Producers/Capabilities Perspective)
WORLD CLIMATE CONFERENCE - 3 Vol. 1 pp. 247 - 274 (28 pages)
Editors: Sivakumar MVK; Nyenzi BS; Tyagi A, (Procedia Environmental Sciences)
Publisher: ELSEVIER SCIENCE BV
10.1016/j.proenv.2010.09.016

Velasco E; Roth M (2009) Measuring emissions of greenhouse gases and air pollutants in cities
Innovation Magazine - The Magazine of Research & Technology Vol. 9 (1) pp. 15 - 17 (3 pages)
Publisher: NUS & World Scientific Publishing

Shi C; Roth M; Zhang H; Li Z (2008) Impacts of urbanization on long-term fog variation in Anhui Province, China
ATMOSPHERIC ENVIRONMENT Vol. 42 (36) pp. 8484 - 8492 (9 pages)
Publisher: PERGAMON-ELSEVIER SCIENCE LTD
10.1016/j.atmosenv.2008.08.002

Roth M (2007) Review of urban climate research in (sub)tropical regions
INTERNATIONAL JOURNAL OF CLIMATOLOGY Vol. 27 (14) pp. 1859 - 1873 (15 pages)
Publisher: WILEY
10.1002/joc.1591

Newton T; Oke TR; Grimmond CSB; Roth M (2007) The suburban energy balance in Miami, Florida
GEOGRAFISKA ANNALER SERIES A-PHYSICAL GEOGRAPHY Vol. 89A (4) pp. 331 - 347 (17 pages)
Publisher: BLACKWELL PUBLISHING
10.1111/j.1468-0459.2007.00329.x

Roth M; Salmond JA; Satyanarayana ANV (2006) Methodological considerations regarding the measurement of turbulent fluxes in the urban roughness sublayer: The role of scintillometry
BOUNDARY-LAYER METEOROLOGY Vol. 121 (2) pp. 351 - 375 (25 pages)
Publisher: SPRINGER
10.1007/s10546-006-9074-4

Vogt R; Christen A; Rotach MW; Roth M; Satyanarayana ANV (2006) Temporal dynamics of CO2 fluxes and profiles over a central European city
34 Chow WTL; Roth M (2006)
Temporal dynamics of the urban heat island of Singapore
INTERNATIONAL JOURNAL OF CLIMATOLOGY Vol. 26 (15) pp. 2243 - 2260 (18 pages)
Publisher: JOHN WILEY & SONS LTD
10.1002/joc.1364

35 Rotach MW; Vogt R; Bernhofer C; Batchvarova E; Christen A; Clappier A; Feddersen B; Gryning SE; Martucci G; Mayer H (2005)
BUBBLE - An urban boundary layer meteorology project
THEORETICAL AND APPLIED CLIMATOLOGY Vol. 81 (3-4) pp. 231 - 261 (31 pages)
Publisher: SPRINGER WIEN
10.1007/s00704-004-0117-9

36 Kanda M; Moriwaki R; Roth M; Oke T (2002)
Area-averaged sensible heat flux and a new method to determine zero-plane displacement length over an urban surface using scintillometry
BOUNDARY-LAYER METEOROLOGY Vol. 105 (1) pp. 177 - 193 (17 pages)
Publisher: SPRINGER
10.1023/A:1019668424982

37 Roth M (2001)
New Approach to Studying Urban Climatology
Innovation Magazine - The Magazine of Research & Technology Vol. 2 (2)
Publisher: NUS & World Scientific Publishing

38 Roth M (2000)
Review of atmospheric turbulence over cities
QUARTERLY JOURNAL OF THE ROYAL METEOROLOGICAL SOCIETY Vol. 126 (564) pp. 941 - 990 (50 pages)
Publisher: WILEY
10.1256/smsqj.56408

39 Kanda M; Moriwaki R; Suzuki J; Roth M; Oke TR (2000)
Study on similarity functions of turbulent statistics in urban boundary layers
Tenki Vol. 47 pp. 493 - 501 (9 pages)
Publisher: The Meteorological Society of Japan

40 Kanda M; Moriwaki R; Suzuki J; Roth M; Oke TR (2000)
Turbulent flux measurement in an urban boundary layer by using scintillometer
Tenki Vol. 47 pp. 453 - 462 (10 pages)
Publisher: The Meteorological Society of Japan

41 Grimmond CSB; King TS; Roth M; Oke TR (1998)
Aerodynamic roughness of urban areas derived from wind observations
BOUNDARY-LAYER METEOROLOGY Vol. 89 (1) pp. 1 - 24 (24 pages)
Publisher: SPRINGER
10.1023/A:1001525622213
Grimmond CSB; Kuttler W; Lindqvist S; Roth M (2007)
Special issue: Urban Climatology ICUC6
INTERNATIONAL JOURNAL OF CLIMATOLOGY Vol. 27 (14) pp. 1847 - 1848 (2 pages)
Publisher: WILEY-BLACKWELL
10.1002/joc.1638

Conference Paper (105)

96 Authored

Roth, Matthias (2019)
Losing our Cool: Cities and Climate Change
(Invited paper)
1st International Workshop on Climate Change, Air pollution, and Public Health (CAPH) CUHK, Hong Kong (30 May 2019 - 31 May 2019)

Roth, Matthias; Li R (2018)
Spatiotemporal characteristics of the urban canopy-layer temperature in Singapore using a sensor network
10th International Conference on Urban Climate (ICUC-10)/14th Symposium on the Urban Environment New York City (06 Aug 2018 - 10 Aug 2018)

Roth, Matthias (2017)
Evaluating urban climate models over a low-rise residential neighbourhood of Singapore
(Invited paper)
Urban Microclimate: From Research To Application HDB Centre of Building Research, Singapore (26 Apr 2017 - 26 Apr 2017)

Roth, Matthias (2017)
Impact of urbanisation on the energy and carbon exchange over a residential neighbourhood in a tropical Asian city
(Invited paper)
Urban Meteorology and Climate Conference City University Hong Kong, Hong Kong (25 May 2017 - 26 May 2017)

Roth, Matthias (2017)
Long-term Observations of Energy Balance Fluxes Over a Tropical Residential Neighborhood and Application to Urban Microclimate Modeling
13th Symposium of the Urban Environment Washinton State Convention Center, Seattle, United States (23 Jan 2017 - 26 Jan 2017)

Roth, Matthias (2016)
Building a Climate Resilient, “Sustainable” City - Singapore’s Response to Climate Change
(Invited paper)
The 5th Asia-Pacific International Conference Westin Chosun Seoul, Seoul, South Korea (24 Nov 2016 - 25 Nov 2016)

ROTH MATTHIAS (2016)
Measuring and modeling the urban microclimate over a residential neighbourhood
Urban Microclimate: Opportunities & Challenges
Urban Climate Research: Applications to Real-World Problems
(Invited paper)
6th International Conference on Sustainable Energy and Environment Dusit Thani Bangkok, Bangkok, Thailand (28 Nov 2016 - 30 Nov 2016)

61   ROTH MATTHIAS (2015)
A multi-model and -namelist ensemble for a tropical urban energy balance
9th International Conference on Urban Climate

62   ROTH MATTHIAS (2015)
Commuter exposure to particles pollution on public transport and at bus stops in Singapore
The 13th International Conference on Atmospheric Sciences and Applications to Air Quality (ASAAQ13)

63   ROTH MATTHIAS (2015)
Does urban vegetation enhance carbon sequestration?
9th International Conference on Urban Climate

64   ROTH MATTHIAS (2015)
Energy balance observations in two residential neighborhoods of Singapore and Mexico City
Croucher Advanced Study Institute 2015-2016: Changing Urban Climate & the Impact on Urban Thermal Environment and Urban Living

65   ROTH MATTHIAS (2015)
Sensitivity analysis and optimization of an urban surface energy balance parameterization at a tropical suburban site
9th International Conference on Urban Climate

66   ROTH MATTHIAS (2015)
Thermal stratification and vegetation effects on the urban micro-climate - a CFD study
9th International Conference on Urban Climate

67   ROTH MATTHIAS (2014)
Hot Cities: Battleground for Climate Change
AeroEarth 2014

68   ROTH MATTHIAS (2014)
Impact of an unusual dry spell on the energy balance of a residential neighbourhood in a tropical city
AGU Fall Meeting

69   ROTH MATTHIAS (2014)
Parameter Estimation and Sensitivity Analysis of an Urban Surface Energy Balance Parameterization at a Tropical Suburban Site
AGU Fall Meeting

70   ROTH MATTHIAS (2013)
Atmospheric CO2 exchange in urban neighborhoods measured by eddy covariance
9th International Carbon Dioxide Conference

71   ROTH MATTHIAS (2013)
Carbon dioxide sequestration by urban vegetation at neighbourhood scale in tropical cities
AGU Fall Meeting

72   ROTH MATTHIAS (2013)
Commuter exposure to aerosol pollution on public transport in Singapore
AGU Fall Meeting

73  ROTH MATTHIAS (2013)
Evaluation of an urban microclimate model in Humid Tropical Singapore
Annual Meeting of the Association of American Geographers

74  ROTH MATTHIAS (2013)
Source attribution of fossil-fuel emissions at the urban scale using stable isotopologues of carbon-dioxide
AGU Fall Meeting

75  ROTH MATTHIAS (2013)
The Role of Vegetation in the Urban Carbon Dioxide Exchange
WISE 2013 International Workshop

76  ROTH MATTHIAS (2012)
Climate processes and measurements in cities
Intl Workshop on the Digitization of Historical Climate Data

77  ROTH MATTHIAS (2012)
How much CO2 does vegetation capture in tropical cities? Case study of a residential neighborhood in Singapore
American Geophysical Union Fall Meeting

78  ROTH MATTHIAS (2012)
How much CO2 does vegetation capture in tropical cities? Case study of a residential neighbourhood in Singapore
AGU Fall Meeting

79  ROTH MATTHIAS (2012)
Impact of urban characteristics on carbon dioxide emissions
Urban Environmental Pollution

80  ROTH MATTHIAS (2012)
Review of recent urban climate studies and climate change for Singapore
AAG 2012 Annual Meeting

81  ROTH MATTHIAS (2012)
The role of vegetation in the CO2 flux from a tropical neighbourhood
8th International Conference on Urban Climate

82  ROTH MATTHIAS (2012)
Understanding scales and layers in the urban environment for meaningful observations
Urban and Rural Meteorology Workshop 2012

83  ROTH MATTHIAS (2012)
Urban flux measurements by eddy covariance: a tool to evaluate emissions inventories
ACCENT-IGAC-GEIA Conference: Emissions to address science and policy needs

84  ROTH MATTHIAS (2011)
An investigation on the temporal spectral analysis of gauge rainfall and model rainfall
8th Annual Meeting of the Asia Oceania Geosciences Society

85  ROTH MATTHIAS (2011)
Cities as drivers of climate change from local to global scales
8th Annual Meeting of the Asia Oceania Geosciences Society

86  ROTH MATTHIAS (2011)
CO2 fluxes from a tropical neighborhood: sources and sinks
AGU Fall Meeting 2011

87  ROTH MATTHIAS (2011)
Direct measurements of the evaporation rate from a tropical urban water reservoir
Singapore International Water Week

88  ROTH MATTHIAS (2011)
Direct measurements urban CO2 concentration and fluxes: advantages and challenges
Carbon dioxide in the urban atmosphere

89  ROTH MATTHIAS (2011)
Diurnal and weekly variation of anthropogenic heat emission in a Southeast Asian city
19th International Congress of Biometeorology

90  ROTH MATTHIAS (2011)
Measurements of carbon dioxide fluxes and energy balance over a suburban ecosystem in a tropical city
AsiaFlux Workshop 2011

91  ROTH MATTHIAS (2011)
Physical characteristics of particles and particles-bound polycyclic aromatic hydrocarbons in selected urban environments of Singapore
8th Annual Meeting of the Asia Oceania Geosciences Society

92  ROTH MATTHIAS (2011)
Review of urban climate research in (sub)tropical regions
CASI: Urban Climatology on Tropical and Sub-Tropical Regions

93  ROTH MATTHIAS (2010)
Airflow Effects: Boundary Layer and Roughness Sublayer
WMO INTER-REGIONAL CLIPS TRAINING WORKSHOP ON URBAN CLIMATOLOGY

94  ROTH MATTHIAS (2010)
Cities and Climate Change
International Conference on Recent Advances in Space Technology Services & Climate Change

95  ROTH MATTHIAS (2010)
DOES SINGAPORE HAVE CLEAN AIR? Review of Singapore’s air quality and climate change mitigation: current situation and future possibilities
BETTER AIR QUALITY (BAQ) 2010 CONFERENCE

96  ROTH MATTHIAS (2010)
Eddy covariance flux measurements of carbon dioxide in urban environments
EGU General Assembly

97  ROTH MATTHIAS (2010)
Evaporation measurements by eddy covariance from a tropical urban water reservoir
AGU Fall Meeting

98  ROTH MATTHIAS (2010)
Mapping the Urban Thermal Environment in Singapore using a GIS Framework
GSID 12 World Conference

99 ROTH MATTHIAS (2010)
Meteorological Measurements in Cities
WMO INTER-REGIONAL CLIPS TRAINING WORKSHOP ON URBAN CLIMATOLOGY

100 ROTH MATTHIAS (2010)
Review of urban CO2 flux measurements using eddy covariance technique: Methodological considerations and results
Western Pacific Geophysics Meeting (AGU)

101 ROTH MATTHIAS (2010)
The Science of Climate Change
Business Leadership on Climate Change Programme

102 ROTH MATTHIAS (2010)
Use of GIS and Remote Sensing Products in support of large area mapping of the canopy-layer urban heat island: Application to Singapore
First International Conference on Sustainable Urbanization (ICSU 2010)

103 ROTH MATTHIAS (2009)
Can canyon and rooftop heat fluxes be combined into neighborhood fluxes?
Association of American Geographers

104 ROTH MATTHIAS (2009)
Carbon dioxide concentration and fluxes in a tropical city
Eighth Symposium on the Urban Environment, AMS

105 ROTH MATTHIAS (2009)
Eddy covariance flux measurements of pollutant gases in urban areas
Asia Oceania Geosciences Society (AOGS) Meeting

106 ROTH MATTHIAS (2009)
Effects of cities on the local climate and the relationship with climate change mitigation and adaptation
Climate Change: Global Risks, Challenges & Decisions

107 ROTH MATTHIAS (2009)
ICUC-7 Presidential Address
The 7th International Conference on Urban Climate

108 ROTH MATTHIAS (2009)
Microclimate in a high-rise residential development in Singapore
The 7th International Conference on Urban Climate

109 ROTH MATTHIAS (2009)
Spatial and temporal distribution of anthropogenic heat emissions in Singapore
The 7th International Conference on Urban Climate

110 ROTH MATTHIAS (2009)
Spatial variation of the canopy-layer urban heat island in Singapore
The 7th International Conference on Urban Climate
111  **ROTH MATTHIAS (2009)**

The IAUC Urban Flux Network – An International Network of Micrometeorological Flux Towers in Urban Ecosystems
AGU Fall Meeting

112  **ROTH MATTHIAS (2009)**

Urban climates and the urban surface: a review of T.R. Oke's contributions arising from conceptual representations of the urban surface
Eighth Symposium on the Urban Environment, AMS

113  **ROTH MATTHIAS (2008)**

Temporal variability of energy and mass fluxes at a residential site in a tropical city
18th Symposium on Boundary Layers and Turbulence

114  **ROTH MATTHIAS (2007)**

Review of (sub)tropical urban energy balance studies
The 2007 Meeting of the Association of American Geographers

115  **ROTH MATTHIAS (2007)**

Temporal and spatial patterns of near-surface CO2 concentrations in Singapore
The 10th International Conference on Atmospheric Sciences and Applications to Air Quality

116  **ROTH MATTHIAS (2006)**

Measurements of CO2 fluxes in a tropical city (Singapore)
AsiaFlux Workshop

117  **ROTH MATTHIAS (2006)**

Observations of Atmospheric Turbulence in Cities
NATO Advanced Research Workshop on Atmospheric Boundary Layers

118  **ROTH MATTHIAS (2006)**

Some characteristics of turbulent CO2 exchange above a tropical urban industrial area
International Conference on Mesoscale Processes in Atmosphere, Ocean and Environmental Systems

119  **ROTH MATTHIAS (2006)**

Urban climate research in tropical regions
Sixth International Conference on Urban Climate

120  **ROTH MATTHIAS (2005)**

First results of energy and carbon fluxes over a tropical city
AOGS 2nd Annual Meeting

121  **Roth M; Salmond JA; Satyanarayana ANV (2004)**

Application of scintillometry in the urban atmosphere
5th Symposium on the Urban Environment  pp. 477 - 480

122  **ROTH MATTHIAS (2004)**

Detailed wind tunnel measurements of turbulence parameters within a regular array of cube roughness
Tenth Asian Congress of Fluid Mechanics

123  **ROTH MATTHIAS (2004)**

Historical progression and geographical contribution of urban climate studies in Singapore
100th American Association of Geographers Annual Meeting
124  **ROTH MATTHIAS (2004)**  
Intermittent exchange of heat and pollutants between the urban canopy and the above-roof boundary layers at night  
Fifth Conference on Urban Environment, AMS

125  **ROTH MATTHIAS (2003)**  
Comparison of turbulent fluxes from roof top versus street canyon location using scintilometers and eddy covariance techniques  
Fifth International Conference on Urban Climate, ICUC-5

126  **ROTH MATTHIAS (2003)**  
Fluxes and profiles of CO2 in the urban roughness sublayer  
Fifth International Conference on Urban Climate, ICUC-5

127  **ROTH MATTHIAS (2003)**  
Methodological considerations regarding the use of scintilometers in the urban roughness sub-layer  
EGS-AGU-EUG Joint Assembly

128  **ROTH MATTHIAS (2003)**  
Turbulence characteristics, similarity and CO2 (co)spectra over an urban canyon  
Fifth International Conference on Urban Climate, ICUC-5

129  **ROTH MATTHIAS (2003)**  
Vertical profiles of CO2 in an urban street canyon  
EGS-AGU-EUG Joint Assembly

130  **ROTH MATTHIAS (2002)**  
Effects of cities on local climates  
IGES/APN Mega-City Project

131  **ROTH MATTHIAS (2002)**  
Urban heat island dynamics in Singapore  
Proceedings of the Fourth Symposium on the Urban Environment

132  **ROTH MATTHIAS (2001)**  
Turbulent transfer in the urban boundary layer  
Third International Symposium on Environment Hydraulics

133  **ROTH MATTHIAS (2000)**  
The heat balance of a residential suburb of Miami, Florida  
Third Symposium on the Urban Environment, AMS

The Tokyo-98 urban turbulence experiment  
Third Symposium on the Urban Environment, AMS

135  **ROTH MATTHIAS (1999)**  
A novel dual-scintillation method to estimate area-averaged turbulent fluxes over an urban surface  
International Congress of Biometeorology & International Conference on Urban Climatology

136  **ROTH MATTHIAS (1998)**  
A wind tunnel study of turbulent flow over a rough surface
Second Urban Environment Symposium

137  **ROTH MATTHIAS (1998)**
Vertical structure of turbulence over cities
Second Urban Environment Symposium, AMS

138  **ROTH MATTHIAS (1997)**
Future topics in urban climatology
International Symposium on Monitoring and Management of Urban Heat Island

139  **ROTH MATTHIAS (1997)**
Review of urban turbulence measurements
Twelfth Symposium on Boundary Layers and Turbulence, AMS

140  **ROTH MATTHIAS (1996)**
Urban turbulence review
International Conference on Urban Climatology (ICUC’96)

141  **ROTH MATTHIAS (1995)**
Efficiencies of turbulent transfer of heat, mass and momentum over a patchy urban surface - controls on urban diffusion
Eleventh Symposium on Boundary Layers and Turbulence, AMS

142  **ROTH MATTHIAS (1994)**
Turbulent transfer over an urban surface
Fourth International Conference on Atmospheric Sciences and Applications to Air Quality

143  **ROTH MATTHIAS (1992)**
Comparison of 'directly' measured suburban storage heat fluxes with model predictions
Conference on Urban Thermal Environment

144  **ROTH MATTHIAS (1992)**
Equality of eddy diffusivities over cities
General Meeting of Japan Meteorological Society

145  **ROTH MATTHIAS (1992)**
Turbulent transfer of moisture over cities
Tenth Symposium on Turbulence and Diffusion, AMS

146  **ROTH MATTHIAS (1990)**
Turbulent transfer characteristics over a rough urban surface
Ninth Symposium on Turbulence and Diffusion, AMS

147  **ROTH MATTHIAS (1988)**
Spectral analysis of turbulence in an unstable suburban atmosphere
Eighth Symposium on Turbulence and Diffusion, AMS

148  **ROTH MATTHIAS (1987)**
Mesoscale airborne albedo of different surface types
IUGG, XIX General Assembly

9 Contributed to

149  **Simón-Moral A; Dipankar A; Doan Q-V; Sanchez C; Roth M; Huang X-Y (2019)**
<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>Simulation of convective precipitation over Singapore using an ensemble approach</td>
<td>Simón-Moral A; Roth M</td>
<td>AOGS 16th Annual Meeting Singapore (28 Jul 2019 - 02 Aug 2019)</td>
</tr>
<tr>
<td>151</td>
<td>A new Urban Ecoligocloal Model to quantify the effect of vegetation on microclimate and water fluxes in cities</td>
<td>Meili N; Roth M</td>
<td>AGU 2018 Fall Meeting Washington, DC (10 Dec 2018 - 14 Dec 2018)</td>
</tr>
<tr>
<td>152</td>
<td>Effects of Heavy Precipitation Events on Near-Surface Climate in Singapore</td>
<td>Schubert S</td>
<td>10th International Conference on Urban Climate (ICUC-10)/14th Symposium on the Urban Environment New York City (06 Aug 2018 - 10 Aug 2018)</td>
</tr>
<tr>
<td>153</td>
<td>Spatial distribution of Particulates in Downtown, Singapore</td>
<td>Venkatraman J; Roth M</td>
<td>METTOOLS 2018 Braunschweig, Germany (25 Sep 2018 - 27 Sep 2018)</td>
</tr>
<tr>
<td>154</td>
<td>Validation of high resolution Met Office Unified Model over Singapore and analysis of its impacts on local and regional climate</td>
<td>Simón-Moral A; Dipankar A; Matthias R; Claudio S; Hans H</td>
<td>AMOS-ICSHMO 2018 Sydney (05 Feb 2018 - 09 Feb 2018)</td>
</tr>
<tr>
<td>155</td>
<td>What can individual walking patterns tell us about outdoor thermal comfort sensation in tropical cities?</td>
<td>Kohler M; Chow W; Roth M</td>
<td>EGU General Assembly 2018 Vienna (08 Apr 2018 - 13 Apr 2018)</td>
</tr>
<tr>
<td>156</td>
<td>Sensitivity Analysis of the MORUSES Canopy Model over Singapore</td>
<td>Simon A; Dipankar S; Roth M; Huang XY</td>
<td>13th Symposium of the Urban Environment Washinton State Convention Center, Seattle, United States (23 Jan 2017 - 26 Jan 2017)</td>
</tr>
<tr>
<td>157</td>
<td>Weather Modelling of Urban Heat Island in Megacities Using Distributed Urban Parameters Derived from Global Datasets</td>
<td>Kawano N; Varquez A; Dong Y; Kanda M; Roth M</td>
<td>13th Symposium of the Urban Environment Washinton State Convention Center, Seattle, United States (23 Jan 2017 - 26 Jan 2017)</td>
</tr>
</tbody>
</table>

**Book Chapter (2)**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>159</td>
<td>Land Use and Environmental Quality</td>
<td>Roth M</td>
<td>Land Use: Challenges and Choices for the 21st Century pp. 184 - 203 (20 pages) Global Institute of Sustainability, Arizona State University</td>
</tr>
</tbody>
</table>