

PUBLICATIONS LIST

Dr Catherine L. Muller

PEER-REVIEWED PUBLICATIONS

- Muller, C.L.**, Chapman, L., Young, D.T., Grimmond, C.S.B., Cai, X. (2013) Towards a Standardised Metadata Protocol for Urban Meteorological Networks, *Bulletin of the American Meteorological Society*, *in press*
- Muller, C.L.**, Chapman, L., Grimmond, C.S.B., Young, D.T., Cai, X. (2013) Sensors & The City: A Review of Urban Meteorological Networks, *International Journal of Climatology*, *in press*
- Muller, C.L.**, Roberts, S., Remedios, J.J., Henderson, J., Wilkinson, J., Wilkinson, M., Illingworth, S., Greaves, R. The Blue Marble: A Model for Primary STEM Outreach, *Physics Education*, *in press*
- Muller, C.L.**, Kidd, C., Fairchild, I. J., Baker, A., (2010) Investigation into clouds and precipitation over an urban area using micro rain radars, satellite remote sensing and fluorescence spectrophotometry, *Atmospheric Research*, 15th International Conference on Clouds and Precipitation - ICCP 2008, vol. 96, Issues 2-3, p. 241-255
- Muller, C.L.**, Baker, A., Hutchinson, R., Fairchild, I.J., Kidd, C. (2008). Analysis of Rainwater Dissolved Organic Carbon Compounds using Fluorescence Spectrophotometry, *Atmospheric Environment*, vol. 42, p. 8036-8045
- Kidd, C. and **Muller, C.L.** (2007) Comparison of Doppler micro rain radars and tipping bucket rain gauges, *Geophysical Research Abstracts*, vol. 9, 10736

Papers in Preparation:

- Muller, C.L.**, Ian J. Fairchild, Ian Boomer, Andy Baker, Chris Kidd, Stable isotopes in precipitation: An assessment of intra-event variability
- Muller, C.L.**, Lee Chapman, Duick T. Young, C.S.B. Grimmond, Xiaoming Cai, A high-density, low-cost urban air temperature network for UHI assessment
- Young, D.T., Lee Chapman, **Muller C.L.**, C.S.B. Grimmond, Xiaoming Cai, Assessing a 'low cost' wireless temperature sensor for HiTemp
- Kidd, C. And **Muller, C.L.** Synoptic scale variations in raindrop size distributions over the Midlands during the 20th July 2007 flood event
- Muller, C.L.** Debugging Geographers: Teaching Programming to Non-Computer Scientists

BOOK CHAPTERS

- Kidd, C. and **Muller, C.L.** (2009) The Combined Passive Microwave-Infrared (PMIR) Algorithm, In: *Satellite Rainfall Applications for Surface Hydrology*, Gebremichael, M. and Hossain, F. (Eds.), Publ. Springer

PROCEEDINGS

- Muller, C.L.**, Chapman, Young, D.T., Grimmond, C.S.B., Cai, X, Sensors & the city: Lessons Learnt and a Proposed Protocol, *International Conference on Urban Climatology 8 Proceedings*, Dublin, Ireland, 6th-10th August 2012
- Chapman, L., **Muller, C.L.**, Young, D.T., Cai, X., Grimmond, C.S.B. An Introduction to the Birmingham Urban Climate Laboratory, *International Conference on Urban Climatology 8 Proceedings*, Dublin, Ireland, 6th-10th August 2012
- Young, D.T., Chapman, L., Bland, S.C., **Muller, C.L.** Assessing a 'low-cost' wireless temperature

sensor for HiTemp, International Conference on Urban Climatology 8 Proceedings, Dublin, Ireland, 6th-10th August 2012

Muller, C.L., Kidd, C. An assessment of cloud-pollution-precipitation interactions and variations over an urban area using vertically-pointing micro-rain radars, satellite remote sensing and chemical analyses, Proceedings of the ICCP, 15th International Conference on Clouds and Precipitation, Cancun, Mexico, 7th-11th July 2008

Muller, C.L., Kidd, C. Quantitative rainfall measurements: A comparison of micro rain radars (MRRs) and rain gauges, Proceedings of the EGU General Assembly, Vienna, 2nd-7th April 2006

TECHNICAL REPORTS

Boesch, H., **Muller, C.L.**, Parker, R., Trent, T. and Whyte, C (2009) An ADVANced retrieval system for greenhouse gases from SCIAMACHY on Envisat (ADVANSE) -WP 2110: Aerosol Database Report, August 2009

Muller, C.L., Kong, X., Remedios, J., Kelliher, H. (A)ATSR Exploitation Plan Volume 6: Review of Remotely Sensed Aerosol and Cloud Products and their Applications, (A)ATSR Exploitation Plan, March 2009

Remedios, J.J., **Muller, C.L.**, Kelliher, H., The (A)ATSR Science Team, (A)ATSR Exploitation Plan Volume 3: Peer Reviewed (A)ATSR Scientific exploitation, (A)ATSR Exploitation Plan, March 2009

The (A)ATSR Science Team, (A)ATSR Exploitation Plan Volume 1: (A)ATSR Project Overview, (A)ATSR Exploitation Plan, March 2009

CONFERENCE PRESENTATIONS AND WORKSHOPS

Muller, C.L., Chapman, Young, D.T., Grimmond, C.S.B., Cai, X, Sensors & the city: Lessons Learnt and a Proposed Protocol, International Conference on Urban Climatology 8, Dublin, Ireland, 6th-10th August 2012

Chapman, L., **Muller, C.L.**, Young, D.T., Cai, X., Grimmond, C.S.B. An Introduction to the Birmingham Urban Climate Laboratory, International Conference on Urban Climatology 8, Dublin, Ireland, 6th-10th August 2012

Young, D.T., Chapman, L., Bland, S.C., **Muller, C.L.** Assessing a 'low-cost' wireless temperature sensor for HiTemp, ICUC-8, Dublin, Ireland, 6th-10th August 2012

Roberts, S.J., **Muller, C.L.**, Knight, P.T. & Ojha, A., Space Academy: Developing Geospatial Capability in UK Schools – The Role of Open Source GIS, Google Earth, Google Forms and the Global Positioning System, Open Source GIS Conference 2010, University of Nottingham, 21st-22nd June 2010

Muller, C.L., S. Roberts, A.Wells, A. Ojha, C. Bishop, J.J. Remedios, T.Moore, A. Edwards, East Midlands, UK: Communication, Education and Training Activities, NEREUS CET workshop, Toulouse Space Show 2010, 8th-11th June 2010

Muller, C.L. Geospatial Data and Technology in the Classroom: Multispectral remote Sensing workshop, Space Conference for Science Teachers, Leicester, 24th-16th April 2010

Ojha, A., Williamson, R., **Muller, C.L.**, Hill, S. Space Academy Workshop, Space Exploration Education Conference, NASA Houston, February 2010

Roberts, S. and **Muller, C.L.** Using the Global Positioning System in the Science Classroom, Association for Science Education Annual Conference 2010, Nottingham, 6-9 January 2010

Muller, C.L., Ojha, A., Hill, S., Remedios, J.J., Moore, T., Wells, A., Barstow, M., Jarvis, T., Brown, C., Allen, S., Green, J., Althorpe, S., Williamson, R., Carr, C., Knight, P. SPACE ACADEMY: Using Earth Observations in Science Teaching, RSPSoc conference 2009, Leicester, 7th - 11th Sept 2009

Muller, C.L., Roberts, S. 'Space - It's closer than you think: Chemistry and Physics Workshop', Science Communication for Teacher Development, York NSLC, March 2009

Muller, C.L., Baker, A.B., Hutchinson, R., Fairchild, I.J., Kidd, C. Rainwater Fluorescence, AGU Chapman Conference on Organic Matter Fluorescence, Birmingham, 20th-23rd October 2008

- Muller, C.L.**, Kidd, C. An assessment of cloud-pollution-precipitation interactions and variations over an urban area using vertically-pointing micro-rain radars, satellite remote sensing and chemical analyses, ICCP 15th International Conference on Clouds and Precipitation, Cancun, 7-11 July 2008
- Kidd, C., **Muller, C.L.** Experience with a Network of Micro-Rain Radars, Ultimate RainMap Meeting, Oxford, 13th-14th September 2007
- Muller, C.L.** Rainfall Events: Water stable isotope variations and other characteristics, ASCRIBE meeting, Malvern, 26th September 2006
- Muller, C.L.**, Kidd, C. Quantitative rainfall measurements: A comparison of micro rain radars (MRRs) and rain gauges, EGU General Assembly, Vienna, 2nd-7th April 2006