

## Publications

In preparation or in press

- a) Pugh, T.A.M., **MacKenzie, A.R.**, Whyatt, J.D., Hewitt, C.N., The effectiveness of green infrastructure on urban air quality, manuscript complete, August 2011

*This paper formed the basis of a report on BBC Radio 4's Costing the Earth programme, broadcast Wednesday 14 September 2011.*

- b) Hunt, D. V. L., D. R. Lombardi, S. Atkinson, A. Barber, M. Barnes, C. Boyko, J. Brown, J. Bryson, D. Butler, S. Caputo, M. Cesario, R. Coles, R. Farmani, M. Gaterell, M. J. Hale, C. Hales, N. Hewitt, L. Jankovic, I. Jefferson, **A. R. MacKenzie**, F. Memon, T.A.M. Pugh, C. D. F. Rogers, D. Smith, D. Whyatt, C. Weingaertner, Using Scenarios to Explore Urban UK Futures: A review of Futures Literature from 1997 to 2010, manuscript complete, April 2011.

Published

1. Pugh, T.A.M., Cain, M., Methven, J., Wild, O., Arnold, S., Real, E., Emmerson, K.E., Owen, S.M., Hewitt, C.N., and **MacKenzie, A.R.**, A Lagrangian model of air-mass photochemistry and mixing using a trajectory ensemble: The Cambridge Tropospheric Trajectory model of Chemistry And Transport (CiTTYCAT), Geosci. Model Dev. Discuss., 4, 2469-2544, 2011.
2. Boyko, C. T., M. R. Gaterell, A. R. G. Barber, J. Brown, J. R. Bryson, D. Butler, S. Caputo, M. Caserio, R. Coles, R. Cooper, G. Davies, R. Farmani, J. Hale, A. C. Hales, C. N. Hewitt, D. V. L. Hunt, L. Jankovic, I. Jefferson, J. M. Leach, D. R. Lombardi, **A. R. MacKenzie**, F. A. Memon, T. A. M. Pugh, J. P. Sadler, C. Weingaertner, J. D. Whyatt, & C. D. F. Rogers, Benchmarking sustainability in cities: The role of indicators and future scenarios, Global Environmental Change, doi:10.1016/j.gloenvcha.2011.10.004, 2011.
3. Pugh, T.A.M., **A.R. MacKenzie**, G. Davies, D. Whyatt, M. Barnes, and C.N. Hewitt, A futures perspective on air quality remediation, Engineering Sustainability, accepted, August 2011
4. Hewitt, CN, K Ashworth, A. Boynard, A. Guenther, B Langford, **AR MacKenzie**, PK Misztal, E Nemitz, SM Owen, M Possell, TAM Pugh, AC Ryan and O Wild, Ground-level ozone influenced by circadian control of isoprene emissions, Nature Geoscience, doi:10.1038/ngeo1271, 2011.

*This paper was given a front-page strap-line and was the subject of a News & Views item in Nature Geoscience. The paper received extensive press coverage, including in Science <http://news.sciencemag.org/sciencenow/2011/09/tick-tock-modeling-emissions-fro.html?ref=hp>.*

5. Misztal, P. K., Nemitz, E., Langford, B., Di Marco, C. F., Phillips, G. J., Hewitt, C. N., **MacKenzie, A. R.**, Owen, S. M., Fowler, D., Heal, M. R., and Cape, J. N.: Direct ecosystem fluxes of volatile organic compounds from oil palms in South-East Asia, Atmos. Chem. Phys., 11, 8995-9017, 2011
6. Ryan, A. C., S. Watkins, **A. R. MacKenzie**, and R. Timmis, Using World War II contrails to study aviation effects on climate, Int. J. Clim., DOI: 10.1002/joc.2392, 2011.

*This paper was the subject of a press release that generated a great deal of interest, with articles in several newspapers, the Fox News web site, Scientific American and the Natural History Magazine.*

*This paper was in the top 5 research stories from University of Birmingham in the media in 2011.*

7. **MacKenzie, A.R.**, B. Langford, T.A.M. Pugh, N. Robinson, P. K. Misztal, D. E. Heard, J. D. Lee, A. C. Lewis, C. E. Jones, J. R. Hopkins, G. Philips, P. S. Monks, A. Karunaharan, K. E. Hornsby, V. Nicolas-Perea, H. Coe, L.K. Whalley, P. M. Edwards, M. J. Evans, D. Stone, T. Ingham R. Commane, K. L. Furneaux, J. McQuaid, E. Nemitz, Yap Kok Seng, D. Fowler, J. A. Pyle, and C.N. Hewitt, The atmospheric chemistry of trace gases and particulate matter emitted by different land uses in Borneo, Phil. Trans. Roy. Soc. Lond. B, 366, 3177-3195, doi:10.1098/rstb.2011.0053, 2011.

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