

Curriculum vitae: David Simpson

Nationality:	British
Born:	20 March 1961, Barrow-in-Furness, England
Present post:	Senior scientist, EMEP MSC-W, Norwegian Meteorological Institute, Oslo, Norway, + Adjunct Professor, Dept Earth & Space Sciences, Chalmers, Göteborg
Languages:	English (native), Norwegian, Swedish (spoken)
Academics qualifications:	B.A. Physics, Oxford University, UK, 1982 Dr. Philos, University of Oslo, 2002 Assoc. Prof., Göteborg University, 2003 (+ Forsker-1183, Norwegian Prof. equivalent, 2002)

General

David Simpson's main work has focused on developing EMEP's 3D Eulerian model system, with special interest in biosphere-atmosphere exchange (BVOC emissions, ozone deposition and N-exchange), ozone chemistry, and in secondary organic aerosol. He has worked within the EU projects MERLIN, NOFRETETE, CARBOSOL, EU-CAARI, and NitroEurope. He is now on the Executive Steering Committee and co-component/WP leader within the FP7 ECLAIRE project (Effects of climate change on air pollution impacts and response strategies for European ecosystems) which commenced in Oct. 2011. He is also PI, and member of both the Steering Committee and board of the strategic research initiative on Modelling the Regional and Global Earth System (MERGE).

He also has extensive cooperation with the biological community (especially ICP-vegetation) through many years of work developing methods for calculating ozone uptake to vegetation.

DS has 81 peer-reviewed papers (see <http://www.researcherid.com/rid/A-3313-2009> for an almost full list), H-index 32, and has numerous (> 100) report and book contributions and Conference papers.

Membership in committees, etc.:

- Board-member, MERGE strategic research initiative on Modelling the Regional and Global Earth System (<http://www.cec.lu.se/o.o.i.s/23982>)
- Executive Steering Group, EU ECLAIRE project

- Associate editor, Journal of Geophysical Research (2012-)
- Steering Committee, Gothenburg Atmospheric Science Centre (2008–2011)
- Member Steering Group for review of two EU-funded projects: ‘Establishment of optimal control areas for acidification, eutrophication and ground level ozone’, 2005-2006, and ‘Analysis of the potential costs savings and environmental and health implications of emission trading for sulphur dioxide and nitrogen dioxide’, 2006-2007.
- Member WP19 (data centre) assessment panel, ACTRIS
- Initiator and editor of Atmos. Chem. Phys. special issue on (http://www.atmos-chem-phys.net/special_issue152.html)
- Lead author (2007-2011) Chapter on ‘Atmospheric transport and deposition of reactive nitrogen in Europe’, European Nitrogen Assessment, published April 2011 (www.ena-esf.org).
- Lead author (2011–2013) sub-chapter on ‘Atmospheric chemistry’, BACC-II (BALTEX Assessment of Climate Change for the Baltic Sea Basin) report.
- Chairman of the “Nature Panel”, within the UN-ECE Task Force on Emission Inventories. (1996–2000)
- Member of the European Commission’s Working Group on Ozone (1997-2000).

Projects

2011– : EU Projects ECLAIRE, PEGASOS.

2010– : Swedish climate modelling project MERGE

2006-2011 : EU Project NitroEurope, EUCAARI, Swedish Clean Air Project (SCARP), MISTRA Project on Organic Aerosols, Nordic Council of Ministers NORPAC Project and Norwegian SORGA project.

2002-2006 : EU projects MERLIN, CARBOSOL, and NOFRETETE, EMEP work on ozone deposition and flux modelling.

1998–2011 : Development of methods for working with secondary organic aerosol

1996–2000 : Chairman of the “Nature Panel”, within the UN-ECE Task Force on Emission Inventories. Responsible for coordinating the chapter on methodologies for assessing biogenic emissions for the EMEP/CORINAIR Atmospheric Emission Inventory Guidebook.

1997–2000 : Member of the European Commission’s Working Group on Ozone.

1996–1999 : Ozone modelling and optimisation for EU INFOS project.

- 1996–1997** : Developed an iterative method for looking at optimisations of multi-pollutant multi-effect problems.
- 1994–1995** : European Commission Auto/Oil I project on local/regional scale photochemical oxidant modelling
- 1990–1999** : Development of EMEP MSC-W Lagrangian oxidant model.
- 1984-1989** : Ozone modelling with trajectory-version of Harwell photochemical model. Modelling of NO_x over the UK with dispersion model and EMEP NO_x model.
- 1987 (6 months), 1989 (3 months)** : ‘contribution-in-kind’ to EMEP activities, payed for by the U.K. Dept. of the Environment. Helped in development of EMEP NO_x model. Initial development of EMEP ozone model.
- 1982-1984** : Development of dispersion models for sulphur and nitrogen, and analysis of observations of NO₂ episodes in London

Peer-reviewed literature

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- Andersson-Sköld, Y. and Simpson, D.: Secondary organic aerosol formation in Northern Europe: a model study, *J. Geophys. Res.*, 106, 7357–7374, 2001.
- Andersson-Sköld, Y., Simpson, D., and Ødegaard, V.: Humidity Parameters from Temperature: Test of a Simple Methodology for European Conditions, *Int. J. of Climatology*, 28, 961–972, doi:10.1002/joc.1586, 2008.
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- Bergström, R., Denier van der Gon, H. A. C., Prévôt, A. S. H., Yttri, K. E., and Simpson, D.: Modelling of organic aerosols over Europe (2002–2007) using a volatility basis set (VBS) framework: application of different assumptions regarding the formation of secondary organic aerosol, *Atmos. Chem. Physics*, 12, 8499–8527, doi:10.5194/acp-12-8499-2012, <http://www.atmos-chem-phys.net/12/8499/2012/>, 2012.
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- Clarke, N., Fischer, R., de Vries, W., Lundin, L., Papale, D., Vesala, T., Merilä, P., Matteucci, G., Mirtl, M., Simpson, D., and Paoletti, E.: Availability, accessibility, quality and comparability of monitoring data for European forests for use in air pollution and climate change science, *iForest - Biogeosciences and Forestry*, 4, 162–166, doi:10.3832/ifor0582-004, <http://www.sisef.it/iforest/show.php?id=582>, 2011.
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