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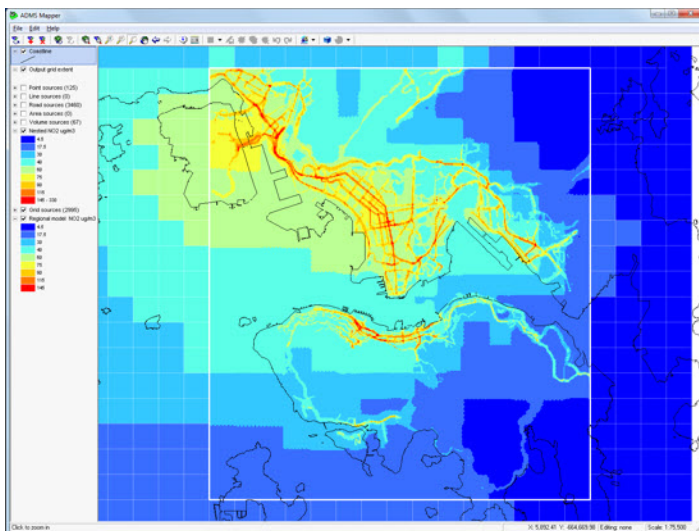
ADMS-Urban & ADMS-Roads User Group Meeting 2014

The annual ADMS-Urban and ADMS-Roads User Group Meeting was held in November 2014 at the Bull Hotel in Peterborough, with a record attendance of over 50 model users from the UK and Europe. CERC would like to thank the guest speakers who gave presentations about their use of ADMS-Urban or ADMS-Roads: Andy Talbot (Atkins); Ricky Gellaty and Suzanne Hodgson (Air Quality Consultants); and Sam Rouse (Brighton and Hove City Council). Other presentations included a discussion of new features in ADMS-Urban and ADMS-Roads 3.4, a practical guide to dispersion modelling using ADMS-Urban and ADMS-Roads, a discussion of advances in the treatment of street canyons and urban canopy flow, and use of ADMS-Urban to model dispersion in a complex urban environment (Hong Kong). All the presentations from the 2014 User Group Meeting are now available to download from the [User Area](#) on the CERC website.

ADMS-Urban & ADMS-Roads 3.4

ADMS-Urban version 3.4 was released in October 2014, and ADMS-Roads version 3.4 in January 2015. The new releases include: improvements to the Comprehensive Output File Processor; increases in the numbers of sources and output points which can be defined in the interface; an option to model a spatial subset of one or more source types from a larger model file; and an extension to the *.fac file format to allow the use of a separate time-varying emissions profile for each day of the week.

ADMS-Urban Regional Model Link released



Our new product, the ADMS-Urban Regional Model Link (ADMS-Urban RML), was also released in October 2014. This is an innovative automated system for nesting ADMS-Urban in a regional air quality model such as CMAQ, CAMx or EMEP4UK, using meteorological data from the meso-scale WRF model, in order to combine both regional and local pollutant transport and chemistry effects. The figure shows example output from the ADMS-Urban RML. Please visit the [ADMS-Urban RML](#) web page to learn more about the system.

CERC NEWS

Remember you can always access the latest CERC news, downloads and modelling advice at the CERC website [User Area](#). You can now also follow CERC news via [RSS](#), [facebook](#), [Twitter](#) and [LinkedIn](#).

Custom developments

Users with complex modelling requirements are reminded that CERC can provide customised developments of ADMS-Urban and ADMS-Roads. Recent examples include implementing specialist chemistry schemes and linking the model to user-specific input data formats. Please [contact CERC](#) to discuss any model developments which you may require.

Tianjin training



Four Chinese visitors from the Tianjin Environment Monitoring Centre, based in the city of Tianjin, China, visited the UK in November 2014.

The visitors attended training on urban air quality and air pollution forecasting in Cambridge, hosted by CERC.

The Chinese delegates also visited an air pollution monitoring site at the Sir John Cass's Foundation VA Primary School in the City of London.

The visitors were shown the equipment and explanations of how the data is logged and processed were given.

The Chinese delegates are hoping to set up a team to cover air quality modelling, forecasting and monitoring in the City of Tianjin on their return to China.



Special licences

Users are reminded that special licences are available for an additional fee, for example to allow the inclusion of more sources in a model run. If this is of interest, please [contact CERC](#) for further details.

Future changes to emissions inventories

Currently emissions data can be imported in to the model from an emissions inventory using Microsoft Access *.mdb files. In a future release we will be migrating from Microsoft Access *.mdb files to a more generic *.csv format because of compatibility issues with the version of Access used for the emissions inventories and the latest versions of Microsoft Office. The new import and export capabilities will have the same functionality as the current version. Model users are encouraged to contact us with any feedback about this plan.



MODELLING TIPS

New EFT version released (6.0.2)

A new version of Defra's [Emission Factor Toolkit](#) has been released recently containing minor bug fixes. Version 6.0.2 was released in November 2014, following on from the releases of versions 6.0 and 6.0.1 earlier that year. ADMS-Urban 3.4 and ADMS-Roads 3.4 incorporate the EFT emission factors from version 6.0.1. These emission factors are still valid, since they are unaffected by the changes made for the release of EFT version 6.0.2. Details of the minor bug fixes in version 6.0.2 of the EFT are provided on pages 5 and 22 of the [EFT User Guide](#).

Maximum concentration in an area of interest

The maximum concentration in an area of interest can be found by setting up gridded output in ADMS-Urban or ADMS-Roads and running the model. The gridded output file can then be loaded into a GIS program (ArcGIS or MapInfo) using the **Import ADMS Output** tool on the ADMS GIS link. The **Clip Points by Boundary** tool can then be used on the resulting set of points, to cut down the grid points to those either within or outside a specified boundary polygon. The **Report Max Values** tool will then allow the maximum concentration in the reduced set of output points to be displayed and copied for pasting into other programs. An area of interest may be a particular part of an urban area, or, in industrial applications, may be the part of the modelling area that is off-site.

Modelling chemistry with complex meteorological data

If you are using the ADMS-Urban or ADMS-Roads chemistry model with meteorological input data containing all three of the parameters 1/LMO (recipLMO), boundary layer height and incoming solar radiation, it is possible to have lines of meteorological data which are valid for dispersion but not for chemistry calculations. In this case, the long-term statistics of concentrations and deposition may not be calculated correctly by ADMS-Urban or ADMS-Roads. Modifying the input meteorological data so that all parameters are invalid for lines where one parameter is missing or invalid will enable the model to calculate long-term averages correctly. This issue will be fixed in ADMS-Urban and ADMS-Roads version 4.0.

PRODUCTS AND SERVICES

Training

ADMS-Urban and ADMS-Roads training courses are run throughout the year at CERC in Cambridge. To find out more about our training courses please visit the [Training](#) page on our website.

Customised training courses are also available to provide training tailored to your organisation's exact requirements.

We are always looking for new topics for our training courses. If there is anything you would like to be covered, please let us know.

If you are interested in any of our training options please email us at training@cerc.co.uk



Consultancy services

For our consultancy services, please see www.cerc.co.uk/consultancy or [contact CERC](#).

Software solutions

For custom-made software solutions, please see www.cerc.co.uk/research or [contact CERC](#).

HELPDESK

You can access the CERC helpdesk in a number of ways:

- From the ADMS-Urban or ADMS-Roads interfaces: Select Help, Email CERC.
- Email: help@cerc.co.uk
- Phone: +44 (0)1223 357773 and ask for the Helpdesk between 09:30 and 17:00 hours.
- Fax: + 44 (0)1223 357492