CERC ADMS 5 News Winter 2015/2016

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Model News

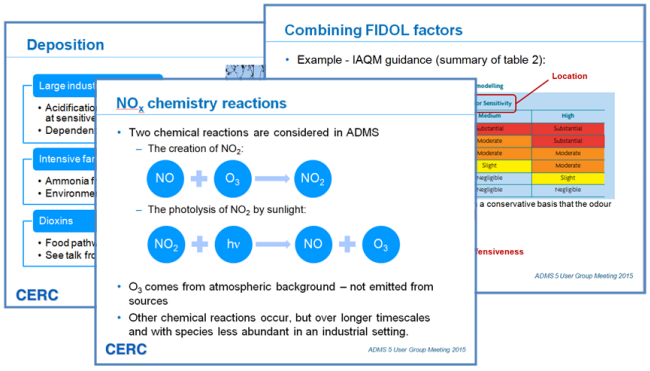
ADMS 5 User Group Meeting 2015

There was a record turnout at this year's ADMS 5 User Group Meeting (UGM), which was held in November at the Manchester Conference Centre. Delegates enjoyed a packed programme of presentations.

CERC would like to give special thanks to our guest speakers: Rosalind Flavell (Fichtner Consulting Engineers); Ben King (Wiser Environment); and Annie Danskin (AECOM).



Download UGM talks now!



The 2015 UGM included a number of talks providing modelling tips; topics covered include:

- New interface features in ADMS 5.1
- Odour modelling
- Overview of complex terrain modelling
- NO_x chemistry in ADMS 5.1

All the talks can be downloaded from the User Area on the CERC website.

AERMOD v15181 released

ADMS 5.1 users can configure the ADMS interface to run AERMOD v15181, released in July. This AERMOD release includes a number of bug fixes and modifications. No changes to model input files are required.

Instructions are available on the User Area.

ADMS 5.1 supported on Windows 10

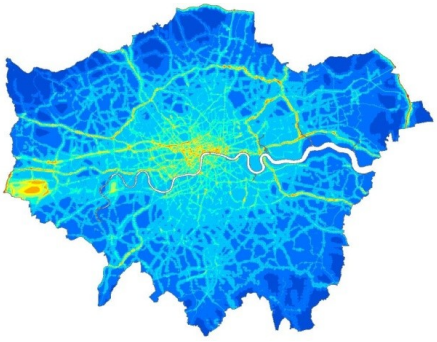
ADMS 5.1 is now fully supported on both 32-bit and 64-bit versions of the newly released Windows 10.

ADMS-Urban 4, ADMS-Roads 4, and ADMS-Airport 4 are now also supported on Windows 10.

Windows 10

CERC News

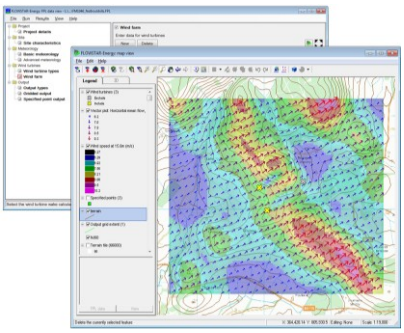
Release of ADMS-Urban 4 & ADMS-Roads 4



ADMS-Urban 4 and ADMS-Roads 4 were released in December 2015. These new releases of CERC's world-leading urban and roadside modelling products include a number of new features, such as:

- An advanced treatment of street canyons;
- The ability to model road tunnels;
- A new import utility.

Release of FLOWSTAR-Energy imminent



FLOWSTAR-Energy is a new product for modelling flow over complex terrain, which also accounts for the effect of wind turbines on local flow and turbulence. FLOWSTAR-Energy predicts free stream, gross and net energy yields for the user's choice of wind turbine type and calculates 3D flow field data. FLOWSTAR-Energy 5.1 is expected to be released in January 2016.

Also in the news

_air_TEXT air quality forecasting service expands to include the Three Rivers area

Volkswagen – CERC's EMIT software can account for real-world diesel emissions

Consultancy News

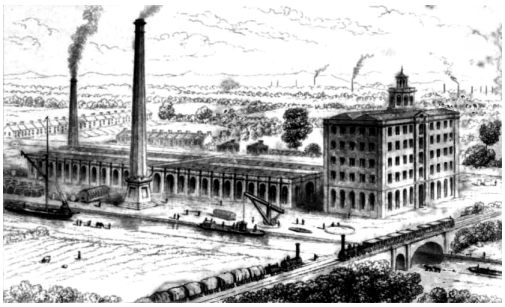
Keynote speech delivered at Riga odour workshop

In November, CERC took part in the workshop "Odour measurement, control, reduction measures and monitoring in the Baltic countries", in Riga, Latvia. The workshop was organised by The Ministry of Environmental Protection and Regional Development of the Republic of Latvia in cooperation with the Latvian Association for Environmental Management and the State Environmental Service.

Attendees included representatives from governmental organisations and regulatory authorities, industry and consultancies. The workshop included a keynote speech by CERC on different approaches to odour regulations in Europe and associated assessment methods. CERC's presentation, and others from the workshop, are available to download here.

Project spotlight: Dispersion modelling for the Industrial Revolution

CERC are currently carrying out dispersion modelling to inform economics research conducted by Dr Stephan Heblich and Dr Yanos Zylberberg at the University of Bristol.



Output from ADMS 5, generated using statistical meteorological data, is being used to investigate the impact of industrial pollution during the Industrial Revolution on the social structures of over 50 British towns and cities. The results of Dr Heblich and Dr Zylberberg's research are expected to be published next year.

Training News

CERC goes north: ADMS-STAR training in Thurso, Scotland

In December 2015, CERC trained a team at Dounreay Site Restoration Ltd near Thurso (the most northern part of mainland Britain). The training focussed on using ADMS-STAR in a range of emergency scenarios, including:

- General use of ADMS-STAR in accidental release modelling;
- In-depth case studies on accidental radioactive releases on-site;
- Case studies for a fire and a radioactive accident on a train.



Upcoming training courses

Our training courses focus on giving users the knowledge and expertise to apply CERC software efficiently to real-life air quality problems. CERC holds regular 2-day courses at its Cambridge offices.

Courses may also be arranged at alternative locations and/or dates; for further details, please contact our training team.

Course	Feb	Jun
ADMS 5	2 - 3	7 - 8

Modelling tips

Comprehensive Output File Processor

This utility is a powerful tool for post-processing comprehensive output from long-term model runs. From a single output file, customised ADMS-format outputs can be selected and analysed as required. Output can include averaging times greater than a week, exceedence percentages and data validity thresholds.

In the model setup, each pollutant should only be included once in the Output screen when generating comprehensive output.

64-bit MapInfo Support

The ADMS-MapInfo link can now be configured to support 64-bit versions of MapInfo.

Contact the helpdesk for instructions.

New and updated helpdesk notes

Instructions for carrying out many common model tasks can be downloaded from the User Area on the website. Some recently added or updated notes include:

Setting up terrain data for input to CERC models

Installing multiple model versions on the same machine

Registering Surfer for use with CERC products

"Missing" output files

Many users have reported "missing" output files. Output files may not be easily visible if file extensions have been switched off in Windows Explorer.

To view all file extensions: select "Folder options" from the Control Panel, and uncheck the "Hide File extensions" option on the "View" tab.

The file extensions will now display correctly, allowing the output files to be identified more easily.

Free LIDAR building height information



Image © Environment Agency

The Environment Agency and Natural Resources Wales have released free high-resolution LIDAR elevation data, which can be used to determine building heights for sites across England and Wales.

Upcoming Conferences

10th International Conference on Air Quality – Science and Application, Milan, 14 - 18 March 2016

CERC will be presenting and have an exhibition stand. Registration is now open.

Harmo 17, Budapest, 9 - 12 May 2016

CERC will be presenting two talks, one on NO_x chemistry validation in ADMS 5 and another on modelling agricultural and bioaerosol emissions with non-point sources. Registration opens 30th January 2016.

Products and Services

CERC have been developing world-leading air dispersion and complex flow modelling solutions since 1985. Our consultancy team was established to apply our expertise to a wide variety of applications for a diverse client base.

Other software solutions



GASTAR

Modelling emergency releases of dense gases



FLOWSTAR-Energy

Advanced software for high resolution air flow over complex terrain



ADMS-STAR

Short-term accidental release modelling



ADMS-Roads and Roads-Extra

Local scale air quality modelling including road and industrial sources



ADMS-Urban

Urban scale modelling including roads, industrial and diffuse sources



ADMS-Airport

Urban scale modelling with detailed treatment of aircraft emissions

For custom-made software solutions, see www.cerc.co.uk/research or contact CERC.

Consultancy services



Our consultancy services include:

- Air quality assessments, e.g. odours, LAQM, planning and permitting
- Specialised modelling, e.g. dioxins, accidental releases, wind energy
- Compilation of emissions inventories and forecasting for large urban areas
- Project support and review services

For more details, see www.cerc.co.uk/consultancy or contact CERC.

Training



CERC offer training courses in the use of their software, which focus on equipping users to carry out air quality studies that conform to regulatory requirements.

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

For more information, see www.cerc.co.uk/training or contact CERC.

Contacting the helpdesk



The CERC helpdesk is on hand to provide model support. Contact us:

- From the ADMS-Urban or ADMS-Roads interface, select Help, Email CERC
- Email help@cerc.co.uk
- Phone +44 (0)1223 357773