



*In this newsletter:*

**ADMS 5 NEWS**

ADMS 5.1 RELEASED  
 OPERATING SYSTEM SUPPORT  
 ADMS 5 USER GROUP MEETING 2015

**CERC NEWS**

EMIT 3.4 RELEASED  
 NEW VALIDATION STUDIES FOR CERC MODELS  
 CAMS AIR QUALITY FORECASTS NOW AVAILABLE FROM CERC

**ADMS 5 MODELLING TIPS**

COPYING A SOURCE IN THE ADMS 5.1 INTERFACE  
 USING ADMS 5.0 AND ADMS 5.1 ON THE SAME MACHINE  
 BACKGROUND MAPS FROM WEB MAP SERVICES IN THE 5.1  
 MAPPER  
 MODELLING ODOUR DISPERSION IN AERMOD FROM THE ADMS 5  
 INTERFACE  
 MODELLING DISPERSION AT ALTITUDE  
 MODELLING A BUILDING WITH A PITCHED ROOF

**THIRD-PARTY SOFTWARE TIPS**

ADOBE ACROBAT .PDF SEARCH ISSUE  
 SURFER POINT PLOTTING ISSUE  
 WINDOWS 7 SOFTWARE UNINSTALL ISSUE

**PRODUCTS AND SERVICES**

SOFTWARE SOLUTIONS  
 CONSULTANCY SERVICES  
 TRAINING

**HELPDESK**

## ADMS 5 NEWS

### ADMS 5.1 released

ADMS 5.1 was released to users with current licences and support contracts in June 2015. The innovative features of ADMS 5.1 are: changes to the criteria for visible plumes; a more advanced version of the ADMS Mapper with additional functions; an increase to the number of output points which can be included in a run; and a facility to both import and export sources, buildings and pollutants to and from the ADMS interface via .csv files. Full details of the new release can be found in the document "[What's New in ADMS 5.1](#)".

### Operating system support

ADMS 5.1 is supported on the Windows 7 and 8 operating systems and has not been tested on Windows Vista or XP. We are in the process of testing ADMS 5.1 for compatibility with Windows 10 and will inform model users if any issues are discovered. Please note that future releases of ADMS will not run on Windows XP.

### ADMS 5 User Group Meeting 2015

The annual ADMS 5 User Group Meeting will be held on 11<sup>th</sup> November 2015 in the Manchester Conference Centre. Online registration for the User Group Meeting will open in the autumn. The annual ADMS 5 User Survey was recently sent to current model users – it asks how you use ADMS 5 and what topics you would like to see discussed at the User Group Meeting. Your views really do help to shape the future development of ADMS 5 so please make your opinions known by completing the survey, even if you are unable to attend the meeting.

## CERC NEWS

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

### EMIT 3.4 released

EMIT version 3.4 was released in June 2015. This new release includes updated road traffic emission factors and fleet data, a facility to quantify the contribution from particular road vehicle types to emissions (source apportionment) and improved calculation speeds. For more information about the new features please refer to the document "[What's New in EMIT 3.4](#)".

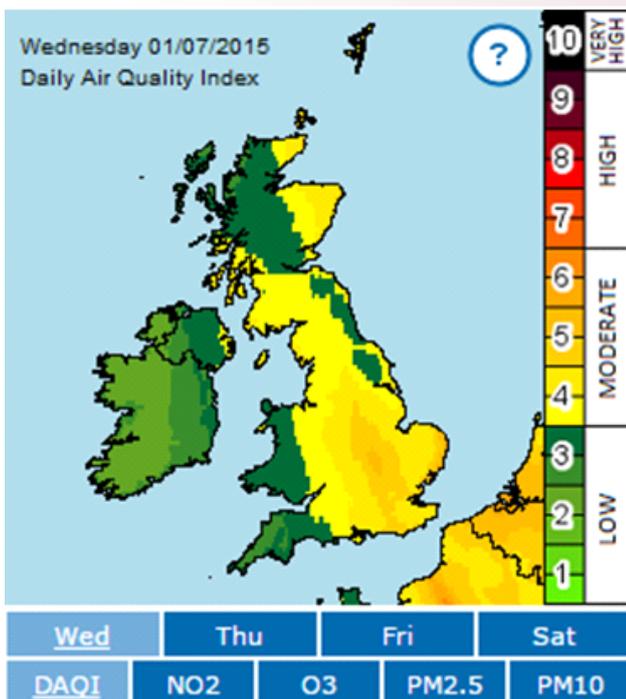
### New validation studies for CERC models

CERC are currently working on new validation studies for industrial and urban sources. Studies of dispersion from agricultural non-point sources are being carried out using ADMS 5 and AERMOD, under a contract from the Atmospheric Dispersion Modelling Liaison Committee. A new road noise barrier study based on measurements in Phoenix, Arizona is being set up in ADMS-Urban as part of an ongoing collaboration with the US Environmental Protection Agency. New studies relating to dispersion from road tunnel portals in the UK and Austria are also being examined using ADMS-Urban.

The existing ADMS 5 validation studies are being updated using ADMS 5.1 and will be available on [the CERC website](#) when completed.

### CAMS air quality forecasts now available from CERC

The latest CAMS air quality forecasts for the UK are now available from the [CERC website](#). The map shows the forecast using the UK Daily Air Quality Index (DAQI).



The map shows pollution from four individual pollutants (nitrogen dioxide, ozone, and particulates PM<sub>10</sub> and PM<sub>2.5</sub>) and an overall value, which is the highest DAQI value from any pollutant. Forecasts are available for four days ahead.

The UK CAMS forecasts shown in the map are taken from the CAMS Regional Ensemble system. [CAMS](#) is a new EU-funded service that consolidates many years of preparatory research and development that was funded by the European Union in the form of the series of MACC projects; MACC was a collaborative project coordinated by the European Centre for Medium-Range Weather Forecasts (ECMWF) and operated by a consortium of 36 members from 13 countries. Data from CAMS is freely available for anyone to use.

## ADMS 5 MODELLING TIPS

### Copying a source in the ADMS 5.1 interface

A source in the ADMS 5.1 interface can be duplicated by right-clicking on the name of the source and selecting Copy from the menu which appears. The duplicate source will appear in the source table immediately below the source which has been copied. After copying a source, the .apl should be saved and re-opened in the ADMS 5.1 interface before using the ADMS Mapper to view or manipulate sources.

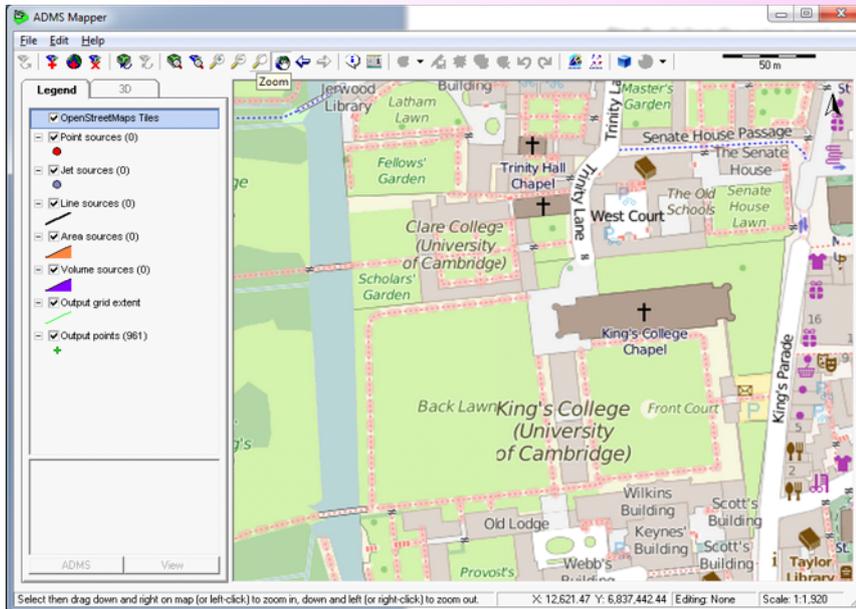
## Using ADMS 5.0 and ADMS 5.1 on the same machine

It is possible to run ADMS 5.0 and ADMS 5.1 on the same machine, for example if needed to complete a project, by following these steps:

1. Copy the whole ADMS 5.0 installation directory to another location on the machine.
2. Uninstall ADMS 5.0 (this should remove the original installation directory but not affect the copy).
3. Install ADMS 5.1.

Shortcuts to ADMS 5.0 will need to be recreated to point to the copied directory.

## Background maps from web map services in the 5.1 Mapper



The ADMS 5.1 Mapper can display a background map layer from a Web Map Service (WMS). There are two options, either to specify a URL for a web map service, or to use a Protocol Layer Connector file (.ttwkp). An example Protocol Layer Connector file for the OpenStreetMap web map service is supplied with the ADMS 5.1 installation. Please refer to Section 5.4 of the ADMS Mapper User Guide for more details about adding background maps.

### *Background map imagery in the ADMS Mapper*

© OpenStreetMap contributors [www.openstreetmap.org/copyright](http://www.openstreetmap.org/copyright).

## Modelling odour dispersion in AERMOD from the ADMS 5 interface

The option to run AERMOD from the ADMS interface cannot currently be used with emissions and output in odour units. However, odour emissions in  $\text{ou}_e$  may be entered into the ADMS 5 interface as concentration emissions in  $\text{g/s}$  in order for the option to run AERMOD to be selected. If this approach is taken, the error message "E04105 ConvertAERMODOutput: Problem reading AERMOD period file." may be obtained. This error message can indicate that the concentrations output from AERMOD in  $\mu\text{g}/\text{m}^3$  are too large for the restricted AERMOD output file format. This error can also occur for some sources for 'real' concentration emissions. A work-around to this error is to scale down the emissions, for example dividing by 1000, then scale up the output concentrations, for example multiplying by 1000.

## Modelling dispersion at altitude

If modelling a location where the source and receptors are at significant altitude, for example in some parts of South America or central Asia, users should define source buoyancy by setting the source temperature, or by using the 'Ambient' option. The option to define source density should not be used. This is because the boundary layer profile of pressure used in ADMS 5 defines the ground plane at sea level. Modelling for sources with significant buoyancy may be less robust at high altitudes.

## Modelling a building with a pitched roof

ADMS 5 uses a single height to represent buildings. For buildings with pitched roofs, users may wish to carry out sensitivity tests using the minimum, average and maximum roof heights. This sensitivity testing is particularly important if the stack is located on the building and the height difference between the stack and the building is small.

## THIRD-PARTY SOFTWARE TIPS

### Adobe Acrobat .pdf search issue

The Find and Search tool results can be inaccurate in Adobe Acrobat if the document cache has become corrupted. This issue can be fixed by purging the cache by: opening the Preferences screen (menu item: Edit/Preferences), selecting Search from the list on the left and then clicking the Purge Cache Contents button. Alternatively, the Enable fast find option can be unchecked. Further information about search preference options can be found on the [Adobe website](#).

### Surfer point plotting issue

Microsoft updates in May 2015 caused an issue in Surfer with plots containing symbols, which can affect the ADMS tool for visualising run inputs in Surfer. If you obtain the Surfer error message: “GsDraw error (1): GenericError Module GsDraw, File Path.cpp, Line 953” a Microsoft patch will need to be applied to fix the issue. The patch can be obtained free of charge from Microsoft [here](#). The computer will need to be restarted for the patch to take effect.

### Windows 7 software uninstall issue

An error message “Error opening installation log file. Verify that the specified location exists and is writable.” can be issued by Windows 7 when uninstalling a program due to an [issue](#) with the operating system. This error can be fixed by stopping and starting the explorer.exe process in Task Manager as follows:

1. Open Task Manager by right-clicking on the taskbar or pressing CTRL+ALT+DEL on the keyboard and selecting Start Task Manager.
2. Select the explorer.exe process and click the End Process button.
3. Select File/New Task (Run...), type explorer.exe in the Create New Task box and click OK.

## PRODUCTS AND SERVICES

### Software solutions

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

### Consultancy services

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

### Training

ADMS 5 training courses are run throughout the year at CERC in Cambridge. To find out more about our training courses please visit our website: [www.cerc.co.uk/training](http://www.cerc.co.uk/training).

Customised training courses are also available to provide training tailored to your organisation’s exact requirements. For example, in May 2015 CERC provided training for ADMS 5 to five delegates at Petrofac International Limited in Sharjah, Dubai. If you would like a customised training course focused on a particular topic or aspect of modelling, please let us know.

If you are interested in any of our training options please email us at [training@cerc.co.uk](mailto:training@cerc.co.uk)

## HELPDESK

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

- From the ADMS 5 interface: Select Help, Email CERC
- Email: [help@cerc.co.uk](mailto:help@cerc.co.uk)
- Phone: +44 (0)1223 357773 ask for the Helpdesk between 09:30 and 17:00 hours
- Fax + 44 (0)1223 357492