

2006 has seen intensive work on the development of a major upgrade, ADMS 4, which was presented at the User Group Meeting in Birmingham on 22 November and will be released early in 2007.

ADMS 4 will include new user features such as,

- A built-in Mapper for entering, editing and visualising the model set up, and for those with Surfer or ArcGIS Spatial Analyst, for plotting colour contours of results
- Increased number of sources, buildings and pollutants
- An option to 'verify' your model input before running
- Generation of a 'report' file, summarising the model input data in a format suitable for inserting into a report
- Ability to enter more detailed dry deposition data
- \*.fac file for entering up to 50 diurnal and 50 monthly profiles and variation of sources with wind direction
- Calculation of weekly averages
- Selection of a subset of met data
- Batch file creator

The new scientific features include,

- The buildings module has been improved; specifically:
  - The maximum number of buildings will be increased to 25
  - Circular buildings will be modelled
  - Calculation of the wind-aligned 'effective building' has been improved
- Wet deposition of SO<sub>2</sub> and HCl has been improved.
- Ability to use spatially-varying flow and turbulence data as input to the model for example, from mesoscale meteorological models, or CFD models.
- Treatment of dispersion in calm conditions.
- Input hourly or constant values of background for all pollutants
- Use of vertical profiles of met parameters
- Area and volume sources can be convex polygons with up to 50 vertices

Extensive validation of the new version against field data and wind tunnel data and some model inter-comparisons are being completed. They will be published on the CERC web site (as currently) when ADMS 4 is released.

The planned release date is February 2007.

END