

NOISEMAP

enterprise and server editions

ATKINS



environmental noise software

NOISEMAP

NoiseMap incorporates over twenty years' experience of hundreds of users in the practical day-to-day assessment of noise. Considerable effort has been made to provide the tools that users need whilst keeping the interface as straightforward and intuitive as possible. Atkins maintains a continuous development effort to add features that users want and to keep the software current with developments in computers and noise mapping techniques.

Versions of NoiseMap

NoiseMap enterprise:

NoiseMap Enterprise Edition is Atkins' long-established software for modelling and mapping noise from roads, railways, industrial, construction and other open sites. It is particularly recommended for users who have a single type of noise (road, rail or industrial) to calculate over moderate areas, such as those who have to undertake occasional assessments of schemes.



Viewing traffic flows in colour

The latest enhancements allow much bigger models to be created, taking advantage of the capabilities of modern computers. In the Enterprise Edition, road, rail and industrial/open sites are modelled separately, whilst common features, such as topography, buildings and noise barriers can be shared. The resulting noise contours can be combined and differences (change of noise level) can also be obtained.

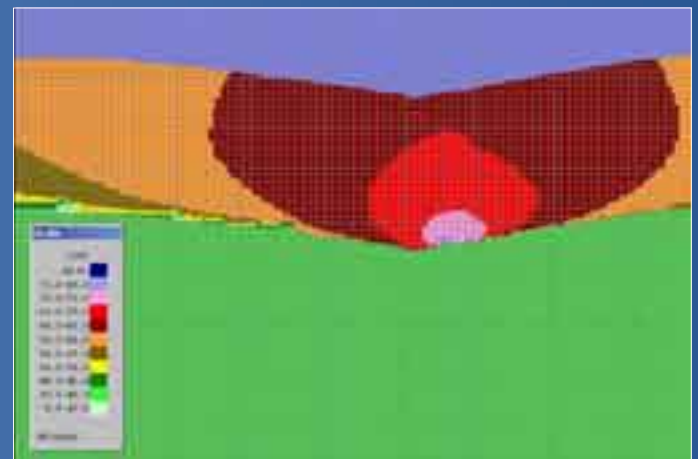


Partial enclosure designed with assistance of NoiseMap

"Nothing short of a masterpiece" - NM, Wales

NoiseMap server:

NoiseMap Server Edition is well-established in the calculation of noise maps over huge areas. Road, rail and industrial sources can all be included in a single model. Server Edition stores its noise model and the resulting noise contours (noise maps) in a highly-efficient database format which allows many users to collaborate, both in creating the model, running the calculations and using the results.



Vertical noise contours (cross-sections)

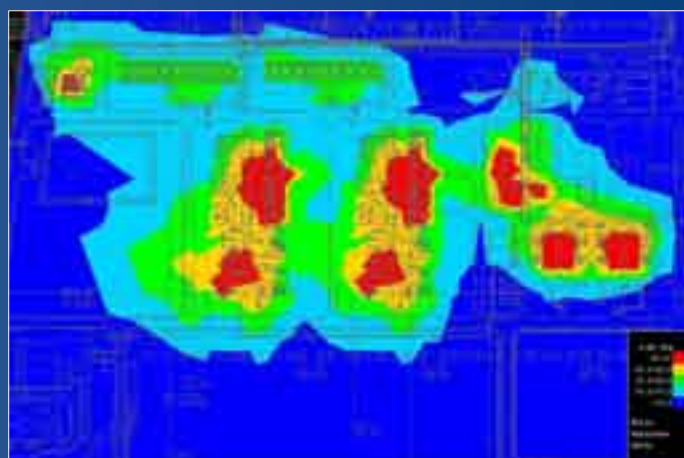


User training and support

On-site training can be provided for up to 6 people using our specialist suite of computers. You just need to provide the space such as a meeting room. In addition to standard courses, we can customise courses to your specific requirements.

Maintenance

Maintenance is optionally available for all NoiseMap software. This includes user support (by telephone, email and Website) and free updates to the software as may be released.



Noise map of petrochemical installations

Server-side software

NoiseMap Server edition requires a server machine to host the database. The client and server software can be on the same machine, but for multiple-user access separate machines are recommended. Both machines need to have network or Internet ports. The server software is provided for automatic self-installation. The server machine is recommended to run Windows XP, Vista or 2003 server operating system.



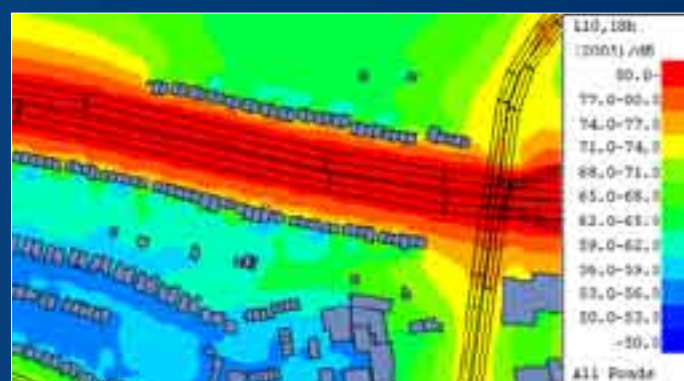
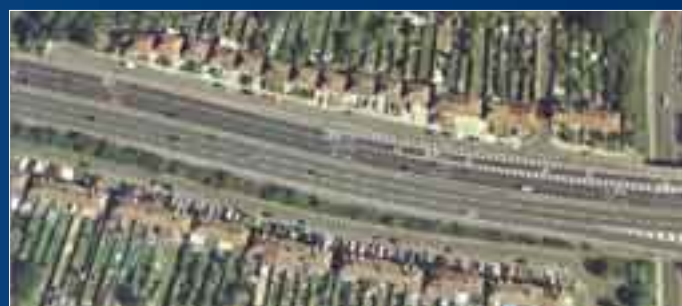
Licences

Flexible licence terms include:

- Permanent (50-year)
- Hire
- Hire-purchase
- Pay-as-you-go

The complete solution

- Noise level tables and noise maps
- Advanced model-building facilities
- Quality assurance functions
- Faster, easier, more accurate than spreadsheets



Noise attenuation of buildings



Noise cluster analysis in association with GIS

"Saved me time in ways I could not have imagined" – AG, London



Principal features

Full technical specifications are available for both editions of the software.

NoiseMap enterprise

- Windows 2000 / XP / Vista
- Fully-integrated single application
- CAD-like user interface
- Easy to add, delete and move model objects
- Black or white background on graphics screen
- Digitiser and bitmap image import
- DXF digital map import / export
- DXF digital map auto-conversion
- Automatic height calculation
- Exports results in choice of ASCII formats
- Easy to swap entire traffic flow situations
- Easy selection of area of noise contour, height and grid spacing
- Filled noise contours and mapping
- Line noise contours
- Noise contours in ISO 1996 & temperature-chart colours
- Noise contours in deep & pastel shades
- Sum and difference contours
- Combined noise source mapping
- Plot noise contours from measurements on irregular grid
- Cross-sectional (vertical) noise contours
- Integrated cross-section, long section and 3D viewers
- View-as-colour (thematic views) for error checking
- Scale, shift and rotate model co-ordinates
- Complete file archiving
- Timed backup
- Undo and redo
- Calculation log file
- Drawing to any Windows-enabled printer or plotter
- Exact drawing to any scale
- Drawing titling and labelling

Model capacity

- 16,000 each of road segments, noise barriers, ground contour points, receiver points

Hardware recommended:

NoiseMap is mathematically intensive and will benefit from the fastest processors available, especially when using Server Edition to model huge areas. A machine specified for CAD or similar work would be suitable. NoiseMap is currently single-threaded and does not benefit from multi-core processors. 1 Gbyte of RAM is recommended on Windows XP and 2 Gbyte of RAM on Windows Vista. 80 GByte hard disk space is adequate. Fast graphics card recommended for viewing large areas, with Open GL support for 3-D viewing. A 19 or 21 inch display will be advantageous. WinTab driver is required for digitising tablets.

Server hardware (NoiseMap server only)

Any reasonably well-specified server hardware, eg 2GHz Intel Xeon with 2GByte of RAM, 160 GByte hard drive, running Windows Server 2003.

For further information please contact:

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Calculation methods

Enterprise

- 'Calculation of Road Traffic Noise' 1988 (L_{10})
- 'Calculation of Railway Noise', 1995 (L_{Aeq})
- BS5228:1997 (L_{Aeq})
- Noise Advisory Council (L_{Aeq})

Server - additional calculation methods

- L_d, e, n, L_{den} (Defra/TRL 2003 & 2005)
- L_{den} (NRA, Ireland)

Additional features of NoiseMap server

- Integrated road/rail/open site noise model
- Practically unlimited model size
- Fully automatic model creation
- Scripting interface to automate user input
- Distributed model creation, calculation and results viewing
- Full modelling of buildings
- Intelligent noise contouring around buildings
- Import/export of shape files
- Multiple scenarios with full inheritance
- Advanced database storage of models
- Internet interface
- Web-viewing of results

