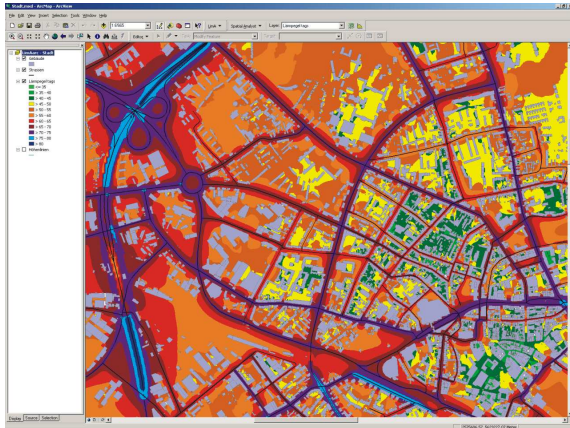


Noise modeling with LimA in ArcGIS®

LimA^{arc} integrates the program system LimA for the calculation of ambient noise into Esri's ArcGIS geographic information system (GIS).

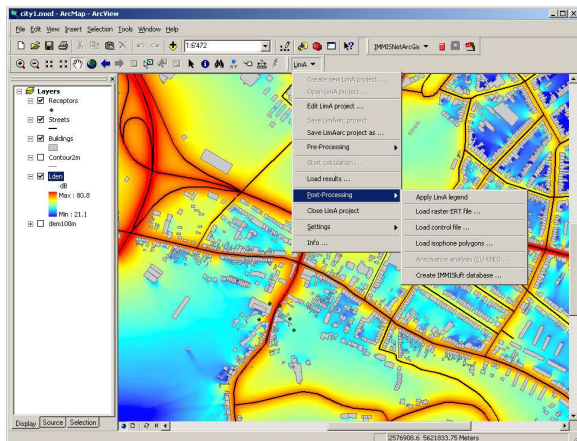
LimA^{arc} embeds LimA in the GIS such that noise calculations can be carried out from ArcGIS®. GIS data becomes noise modeling data, thus avoiding data conversions and redundancies.



Noise mapping with LimA^{arc} in ArcGIS

Integration of LimA concept

LimA^{arc} is a joint development of IVU Umwelt and Stapelfeldt Ingenieurgesellschaft. Important LimA functionality like e. g. the server concept, its extremely fast calculation core, all implemented calculation standards, annoyance analyses and the customizable object library including the help system, are directly used by LimA^{arc}.

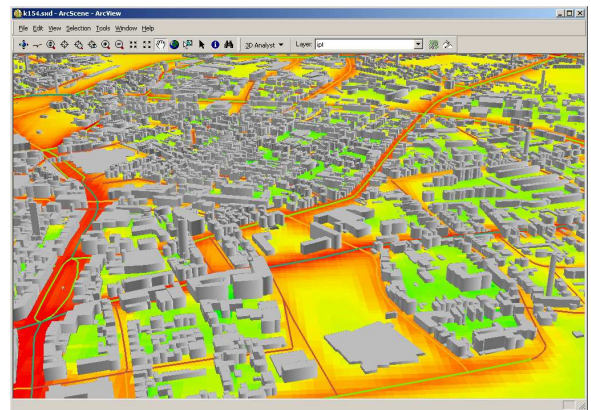


LimA^{arc} menu in ArcGIS

Noise calculation in GIS

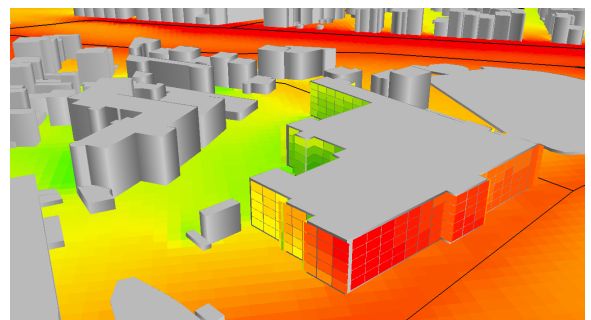
- GIS user interface
- data set without redundancies
- use of Esri's geodatabase
- extending, editing, correction and adaptation of data using the powerful ArcGIS® edit tools
- set up of parameter and start of calculations within the GIS
- automatic conversion of noise calculations results into GIS data as raster in the GRID-Format (on request geodatabase and shape format)
- direct use of data for further analysis in ArcGIS® and combination with additional GIS data
- map creation using the powerful tools of ArcGIS®
- re-use of data for other environmental tasks as e. g. air pollution modeling

3D-Data



3D representation of noise mapping

- easy and fast presentation of 3-dimensional data using the ArcGIS® 3DAnalyst
- efficient visual plausibility checks
- impressive and informative presentation of results in combination with other geodata
- Calculation of façade levels for detailed analysis



Façade elements in LimA^{arc}

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limaarc.1s.en.doc/06.06.12

More information about LimA is available at www.stapelfeldt.de.

Information about LimA^{arc} and IVU Umwelt GmbH is available at www.ivu-umwelt.de/e.

IVU Umwelt offers expertise, studies and consulting for air quality modeling, including data acquisition and preparation, graphical and numerical data representation and documentation, and impact analysis of measures to be taken.