Swiss Society of Cartography

Topographic Maps

Map Graphics and Generalisation

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Topographic Maps - Map Graphics and Generalisation
Trial Version (english) --> see: www.cartography.ch --> Publications
CD-ROM "MAP GRAPHICS AND GENERALISATION" – A NEW TOOL FOR CARTOGRAPHIC DESIGN

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Abstract

Map graphic and generalisation have the common aim to generate a clearly legible and understandable map image for the user, in which individual statements are combined into a logically constructed, informative, positionally correct overall image, which is – after all – also attractive. Confusing, un-coordinated, incorrect, overloaded and illegible maps are frustrating for the user and are often useless.

The CD-ROM "Map Graphics and Generalisation"

The Swiss Society of Cartography decided to replace the instrumental publication “Cartographic Generalisation – Topographic Maps” by a fully revised version. To allow a versatile use of this publication, it is offered in the pdf-format on a CD-ROM. The pages can be printed in colour or displayed on screen. The digital format allows a user-friendly guidance through the list of contents and additional search functions.

The topics treated in this publication are an important module for each training step in map graphics. It is an essential component in the formation of every map designer, regardless of the working tool used and of the presentation media. The publication is directed at all those working in the field of cartography and in related fields such as GIS, geomatics and web graphics.

It was intended to concentrate and limit the content to real core statements. The vast extent of the topic required a restriction to examples in map graphics and generalisation for topographic maps at medium scales. This, however, does not exclude the application of different statements to other scales and map types. The presented principles and recommendations are essentially based on traditional methods applied to the production and the up-dating of the Swiss Topographic Map series. Since topographic maps of this range of scales have more or less the same aim, the emphasis here is placed on the generalisation due to different map scales. It is characterized by a drastically increasing reduction of the available space for the same initial information. In the smallest scales and in the field of thematic maps, the kind and degree of generalisation are based on different aims and are therefore richer in variation and more individual.

The inclusion of foreign maps with their many topographic peculiarities and national traditions would have increased the number of examples considerably; therefore a limitation and an exemplary treatment of the vast field of generalisation were unavoidable.

For the purpose of a clear systematic approach in generalising the individual elements, the principles of selection and classification of the represented objects, also called model generalization, are treated first, followed by graphic generalisation and individual solutions.

The problems and methods of the interaction between different elements are demonstrated with a vast number of illustrations. The initial model for the different generalisation steps is either a map at a large scale or a digital landscape model.

The minimum dimensions and distances as well as the representation of the illustrations are primarily developed for printed maps. Special conditions for the display of maps on computer screens are indicated. In spite of the restricted space available, the aim is to offer an optimum solution for complex original data using a well-adapted degree of generalization, irrespective of the media in use.

References

For details of the CD-ROM “Map Graphics and Generalisation” (Swiss Society of Cartography: Cartographic Publication Series No. 17), see: www.cartography.ch or: www.kartographie.ch
Biography

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