

GEO-COMMUNICATION AND DAILY AVALANCHE AWARENESS

Michaela Kinberger

University of Vienna, Department of Geography and Regional Research
Universitaetstr. 7, A-1010 Wien, AUSTRIA

Phone: (+43 1) 4277 48646

Fax: (+43 1) 4277 48649

E-mail: kinb@atlas.gis.univie.ac.at

Karel Kriz

University of Vienna, Department of Geography and Regional Research
Universitaetstr. 7, A-1010 Wien, AUSTRIA

Phone: (+43 1) 4277 48641

Fax: (+43 1) 4277 48649

E-mail: kriz@atlas.gis.univie.ac.at

Keywords: geo-communication, avalanche risk, visualization

Even in our high tech world with mobile devices and GPS topographic maps still play an important role in mountainous regions for avalanche awareness and way finding activities. They are useful tools in field for orientation as well as for planning purposes. You can retrieve directions and heights from a topographic map, but cannot directly perceive temporal changing phenomena, such as the actual snow depth or current avalanche risk.

Mountaineers in general should avoid avalanche endangered areas. However, to assess the current avalanche risk it is important to have and even more to understand information on the local weather-conditions, snow pack formation and local topography. Besides the depiction of selected topographic features, such as terrain aspect and slope - these are being currently implemented in various large-scale alpine maps – it is just as important to disseminate other relevant avalanche topics, such as real-time meteorological information, in a spatial cartographic fashion. Distributing information on the current air temperature, wind situation and snow conditions in an adequate cartographic form is just one way of functional and practical geo-communication.

This contribution gives an overview and insight on existing methods and approaches as well as difficulties in geo-communication and presents recently developed cartographic representations for daily avalanche awareness.