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Historical cartography digitization: the experience of the Provincial Archive of Trento (Italy): technologies, methodologies, metadata and results.

Keywords: digitization, historical cartography, metadata, long-term conservation, archives, standards, methodologies, digital technologies

Abstract

The microfilming and digitization laboratory of the Provincial Archive of Trento (Italy) has been active since 2002. The lab's activities cover the digitization of historical maps, preserved both in the archive of Trento, and in other local institutions. The laboratory is equipped with a large format digital scanning system, specifically designed to scan historical manuscripts, maps, engineering drawings, newspapers, fine art and delicate materials.

The system provides a very wide colour gamut, with high geometric accuracy.

Particular attention is paid to original's safety, in order to avoid any risk of physical damage. Paper maps are very sensitive to heat and UV radiation; they also are often difficult to manipulate due to their large format.

The digitization activities are intended for long-term conservation of the digital resources. This requires metadata enhancement. Resources are subsequently stored in a repository and linked to descriptive records in a public-access database. The availability of the images for consultation by the public allows a better preservation of the originals.

The digitization process is aligned with international standards and guidelines (e.g. MINERVA PROJECT).

In these years, thousands of maps have been digitized. Particularly important projects concerned: the most ancient maps of the territory, dating from the eighteenth century; "*Mappe d'avviso*" and ancient cadastral maps, dating from the second half of the eighteenth century to 1875; World War I military maps, a lot of which are conserved in our territory, located across the front line between Italy and Austria during the First World War.

The paper shows: a) the methodologies adopted and the technology used in the digitization process, by the choice of original material until the storage of digital resources; b) the results achieved so far, in terms of available digital resources, and possibility of access to them.

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