

WHY CARTOGRAPHY IS RELEVANT, ATTRACTIVE AND CONTEMPORARY

The New Face of Cartography



Perhaps now more than ever, cartography is affected and advanced by technological innovations and developments. New possibilities have emerged for acquiring, processing, modelling and distributing spatial data. In the context of new technologies, an increasing number of cartographic applications are either already available or in development. Cartographers are being called upon to redefine the role of their scientific discipline and to integrate the theoretical foundations with these technological developments. The International Cartographic Association (ICA) has a crucial role to play in this transition

Traditional paper-based cartography is increasingly evolving into a modern discipline that makes use of the latest technologies, be it in data acquisition, data distribution or data visualisation. Maps are becoming more popular and are being distributed more widely.

This is demonstrated by the enormous number of online map-based applications and mobile apps. Maps serve as interfaces to abundant information systems and as frameworks for presenting spatial information, either through their application on mobile input or output devices or through the internet.

Cartographic Data Capturing

Nowadays, on a global level, a considerable amount of fundamental data used for deriving cartographic information is initially acquired by means of remote sensing, whether from airborne or space-borne platforms. This implies that unmanned aerial vehicles (UAVs) are also of increasing importance for detailed depictions. In addition to UAV data, whether it be simple digital imagery in the visible range or hyper-spectral data, ultra-high resolution (UHR) space imagery is one of the major information sources globally. The third dimension, which is of the utmost importance in cartography, can now be derived in near real time by either automated photogrammetric plotting of digital photographs in a multi-stereoscopic mode, by 3D image range cameras or by laser-scanning (Lidar), both airborne and terrestrial. The synergetic use of these various acquisition technologies and techniques can lead to new developments and applications in cartography; one example of this is rapid mapping, the ultimate method for the near-real-time provision of best-quality cartographic information after disasters.

[Continue reading in the online edition of GIM International](#)