

INNOVATIVE TECHNOLOGY FOR THE CREATION OF 3D MAPS AND APPLICATION

Temenoujka Bandrova

Department of Photogrammetry and Cartography, UACG, Sofia, Bulgaria

Keywords: 3D map, 3D symbols, Cartography, Innovative technology, Natural disasters, Floods

Abstract

“From Paper to Virtual Map” is an innovative technology for creating of 3D (three-dimensional) maps. The technology is proposed as a very cheap and easy way to create 3D maps. A power graphic station is not necessary for this aim. This is very important for countries as Bulgaria where is not easy to have expensive computer equipment.

This technology, proposed by the author was developed from a novel application – a 3D cartographic symbol system. The 3D city maps created consist of 3D geometry, topographic information and photo-realistic texturing and 3D symbols, which contain quantitative and qualitative information about the objects. Animated presentations are also available according users' needs.

The technology and the results have many users in different branches of practice, science, education, business, etc. Ones of special users of 3D cartography are the children and students, especially in emergency situations. We try to help them, their teachers and parents by the one of proposed technology's application.

International organizations publish information brochures about how to teach children correct behavior and preparation for natural disasters. Questions as “What do you do in case of an emergency” are discussed. Standards and technologies related to emergency management are considered and the technology for creating of 3D maps is proposed to be used in educational process.