Different DEM techniques for orthophotography

التقنيات المختلفة لعمل نموذج سطح الأرض الرقمي لإنتاج الصور النموذجية

Prof. Dr. Eng. Rifaat Ismaiel
Shoubra faculty of engineering

Dr. Eng. Ayman El-shehaby
Shoubra faculty of engineering

Eng. Lamya Gamal Edeen Taha
Researcher assistant at NARSS

Abstract

The generation of orthophoto from remotely sensed images, such as aerial photos, satellite images and airborne scanning images is an important task for various mapping applications. The accuracy of digital elevation model (DEM) data is one of the most important points, which affects the precision of the final orthophotos. So that we want to study the effect of relief on the planimetry. In order to obtain the best resulted Digital orthophoto, which can be used to produce planimetric map. In this paper we will study the generation of digital orthophoto using different DEM approaches. Such as, (field observations using GPS+AT), Photogrammetric techniques (analytical & digital). This will be followed by some experiments about the quality of the different DEM to get the best results concerning the digital Orthophoto.