

ABSTRACT

The Thesis uses UAV to collect data for photogrammetric purposes. Its goal is to create 3D models from UAV data in selected software. These are applied based on the analysis of specific UAV-focused software. The theoretical part contains, besides the basic principles of UAV photogrammetry, a search for appropriate methodology for the preparation and implementation of the flight mission. Data processing took place in the Pix4D and 3DSurvey, compared to Agisoft Photoscan, used for general visualization. The resulting accuracy and quality of outputs is reviewed in the final section, where it is shown that UAV-specific softwares show greater accuracy of the model in position and space. The purpose of this research is to point out not only the potential of common UAV in visualization of spatial data, but also the software specific to these data.

Keywords

UAS, UAV photogrammetry, 3D model, Agisoft Photoscan, Pix4D, 3DSurvey