

UAV- BASED IMAGING – DIGITAL ELEVATION MODEL EXTRACTION

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ABSTRACT: Data, whether image, textual, or tabular must be manipulated using application program to extract required appropriate information format for the decision makers. Digital elevation models (DEMs) are frequently applied to solve different environmental issues because of its data structure simplicity and improved computational efficiency. Consequently, it must be generated with optimum accuracy. This inquiry aims at bringing forth two different DEMs of the same survey area using commercial software and executable freeware and judging their accuracies with predicted accuracy. The input photographs were taken from the images obtained by a low cost, high resolution unmanned aerial vehicle system (UAVs) and a sub-meter accuracy is expected. We, also described sources of digital elevation model data to include their strengths and weaknesses, sources of modeling errors and concluding with recommendations.