UNIVERSITI TEKNOLOGI MARA

ACCURACY ASSESSMENT OF AGISOFT PHOTOSCAN SOFTWARE IN MODELLING KERBAU CAVE

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Thesis submitted in fulfillment of the requirements for the degree of Bachelor in Surveying Science and Geomatics (Honours)

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Jan 2019

AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

The Kerbau Cave is one of the most precious and important historical heritage for us to conserve. The relevant of this study may help in determining the measurement accuracy of the Agisoft Photoscan software using Camera Nikon D3100. At the end of this study, the Kerbau Cave model will be assessed based on camera quality and Agisoft Photoscan software by using Close Range Photogrammetry method and can be used for better analysis. The aim of this project is to investigate the target marker has affect the accuracy of Agisoft Photoscan software by using Close Range Photogrammetry Method and to know the accuracy assessment of software in modelling Kerbau Cave, Kodiang. The measurement of the Kerbau Cave compared with the conventional measurement made by using tape. Three-dimensional image of the Kerbau Cave to overview all sides of the object in order to analyse the relation of the accuracy Agisoft. In this thesis, I think that target marker will have a great impact on the accuracy of the Kerbau cave model but the type of software also plays a very important role because different software has its own advantages. Therefore, conventional measurement will also be collected and compared with the Agisoft Photoscan software used and I think Agisoft Photoscan software will get almost same result measurement with conventional method.

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