

No. 5 Digital Mapping of UMK Jeli Campus Using Drone Technology

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Abstract

Aerial or satellite images are conventionally used for geospatial data collection and in producing a topographic map. The Unmanned Aerial Vehicles (UAV) technology such as drone has developed by providing very high spatial and temporal resolution data at a lower cost. Nowadays, drones not only use for military purpose but also been utilized widely by the public community for mapping, monitoring, video capturing activities and as a hobby. This present study focuses on the utilization of drone technology to produce a digital map of UMK Jeli Campus. The objective of this study is to access the capability and the accuracy of the drone in producing a digital map. Parrot ANAFI and DJI FC6310 devices were used as a platform to acquire digital images of the study area. After capturing the digital images, ground control points were established with the aid of a handheld global positioning system (GPS) device. Images were processed using Agisoft Photoscan software to produce a digital map of UMK Jeli Campus. This study shows that UAV can be used for producing a digital map at sub-meter accuracy and it can also be used for diversified applications.

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