

Paper Number: 4606

An application of UAV for coastal mapping, east coast of Korea

Kim, B.O.¹, Yun, K.H.¹, Chang, T.S.², Bahk, J.-J.², and Kim, S.-P.²

¹Chungnam National University, Daejeon, South Korea, bkim1052@gmail.com²Korea Institute of Geoscience and Mineral Resources, Deajeon, South Korea

Low-altitude Unmanned Aerial Vehicles (UAV) have been widely used for making rapidly large-scale maps on small area. We developed a photogrammetric system including a radio-controlled drone with automatic navigation system and a non-metric digital camera. The non-metric camera is calibrated in the laboratory to achieve the photogrammetric requirements. In order to investigate the reliability of this system on coastal mapping, 3-D morphological information of several beach environments, east coast of Korea is constructed using a soft copy plotter (ERDAS/Leica Photogrammetric Suite) and compared with ground truth data obtained by using a VRS-GPS system.

