Volume XXXIX-B1

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B1, 411-414, 2012
www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XXXIX-B1/411/2012/
doi:10.5194/isprsarchives-XXXIX-B1-411-2012

VISUAL UAV TRAJECTORY PLAN SYSTEM BASED ON NETWORK MAP

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Keywords: Trajectory Planning, Image, UAV, Google earth, Map, Parameter

Abstract. The base map of the current software UP-30 using in trajectory plan for Unmanned Aircraft Vehicle is vector diagram. UP-30 draws navigation points manually. But in the field of operation process, the efficiency and the quality of work is influenced because of insufficient information, screen reflection, calculate inconveniently and other factors. If we do this work in indoor, the effect of external factors on the results would be eliminated, the network earth users can browse the free world high definition satellite images through downloading a client software, and can export the high resolution image by standard file format. This brings unprecedented convenient of trajectory plan. But the images must be disposed by coordinate transformation, geometric correction. In addition, according to the requirement of mapping scale ,camera parameters and overlap degree we can calculate exposure hole interval and trajectory distance between the adjacent trajectory automatically . This will improve the degree of automation of data collection. Software will judge the position of next point according to the intersection of the trajectory and the survey area and ensure the position of point according to trajectory distance. We can undertake the points artificially. So the trajectory plan is automatic and flexible. Considering safety, the date can be used in flying after simulating flight. Finally we can export all of the date using a key

Conference Paper (PDF, 336 KB)

Citation: Li, X. L., Lin, Z. J., Su, G. Z., and Wu, B. Y.: VISUAL UAV TRAJECTORY PLAN SYSTEM BASED ON NETWORK MAP, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B1, 411-414, doi:10.5194/isprsarchives-XXXIX-B1-411-2012, 2012.

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