

Volume XXXIX-B1

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B1, 339-343, 2012 www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XXXIX-B1/339/2012/ doi: 10.5194/isprsarchives-XXXIX-B1-339-2012 © Author(s) 2012. This work is distributed under the Creative Commons Attribution 3.0 License.

AN OPTIMAL IMAGING-SCHEDULING ALGORITHM FOR THE MULTI-STRIP IMAGING-MODE OF THE HIGH-RESOLUTION AGILE SATELLITES BASED ON CERTAIN STEP-SIZE **SEARCH**

B. Yang, M. Wang, S. Jin, and J. Pan State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, China

Keywords: high resolution, agile satellite, multi-strip imaging-mode, imaging-schedule

Abstract. The high flexibility of the agile satellite can significantly improve its ability to obtain data. Compared with ordinary satellite platforms, the imaging-scheduling is more important, and is the basis to ensure the efficiency and quality of data for the agile satellite. To be aimed at the multi-strip imaging-mode of the agile satellite, from the perspective of the image-quality, a imagingscheduling algorithm based on certain step-size search in the multi-strip imaging-mode of the agile satellite is proposed, and the influence of the selection of the imaging time-window on the multi-strip image quality is analyzed quantitatively through the experimental data. The results show that the optimal image data can be obtained through the image-scheduling algorithm.

Conference Paper (PDF, 884 KB)

Citation: Yang, B., Wang, M., Jin, S., and Pan, J.: AN OPTIMAL IMAGING-SCHEDULING ALGORITHM FOR THE MULTI-STRIP IMAGING-MODE OF THE HIGH-RESOLUTION AGILE SATELLITES BASED ON CERTAIN STEP-SIZE SEARCH, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XXXIX-B1, 339-343, doi:10.5194/isprsarchives-XXXIX-B1-339-2012, 2012.

Bibtex EndNote Reference Manager XML