



Volume XL-4

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-4, 311-314, 2014
www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-4/311/2014/
doi: 10.5194/isprsarchives-XL-4-311-2014

Positioning Accuracy Analysis and Application for Worldview-1 Stereo Imagery

Z. Xiao^{1,2}, B. Yang^{1,2}, and H. Zhang^{1,2}

¹Beijing Institute of Surveying and Mapping, No.15 Yangfangdian Road, 100038, Beijing, China

²Beijing Key Lab of Information Engineering in City Space, 100038, Beijing, China

Keywords: WorldView-1, High resolution satellite, Stereo images, Positioning accuracy

Abstract. This article introduced the progress of processing the WorldView-1 satellite image by using the air triangulation method. And different adjustment models were used to improve the vendor provided RPC (Rational Polynomial Coefficients) accuracy. WorldVfew-1 images in Beijing are used to test the correction accuracy of these adjustment models. Results show that the systematic errors of RPC model can be eliminated using a small amount of control points. The planar RMSE can reach 1.6 pixels (0.9 meter).

[Conference Paper](#) (PDF, 310 KB)

Citation: Xiao, Z., Yang, B., and Zhang, H.: Positioning Accuracy Analysis and Application for Worldview-1 Stereo Imagery, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-4, 311-314, doi: 10.5194/isprsarchives-XL-4-311-2014, 2014.

[Bibtex](#) [EndNote](#) [Reference Manager](#) [XML](#)