

IN-STRIP MATCHING AND RECONSTRUCTION OF LINE SEGMENTS FROM UHR AERIAL IMAGE TRIPLETS

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ABSTRACT:

In this study, we propose a new line matching and reconstruction methodology for aerial image triplets that are acquired within a single strip. The newly developed stereo reconstruction approach gives us better line predictions in the third image which in turn helps to improve the performance of the matching. The redundancy information generated in each stereo match gives us ability to reduce the number of false matches while preserving high levels of matching completeness. The approach is tested over four test patches and produced highly promising line matching and reconstruction results.

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