

# PE&RS

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### HIGHLIGHT ARTICLE

## 1005 Disentangling Environmental Variability from Land Management Decisions in Changing Semi-arid Savannas of Southern Africa

*Narcisa G. Pricope, Michael W. Binford, and John D. All*



### PROFESSIONAL INSIGHT

## 1014 An Interview with the Landsat Legacy Project Team

### PEER-REVIEWED ARTICLES

#### 1029 Association-Matrix-Based Sample Consensus Approach for Automated Registration of Terrestrial Laser Scans Using Linear Features

*Kaleel Al-Durgham and Ayman Habib*

An approach for the automatic registration of terrestrial laser scans using linear features. The conceptual basis of the proposed matching strategy is establishing hypotheses about potential minimal matches and then quantifying the agreement between the scans using the estimated transformation parameters.

#### 1041 A Robust Image Matching Method based on Optimized BaySAC

*Zhizhong Kang, Fengman Jia, and Liqiang Zhang*

A robust image-matching method based on the optimized Bayes SAMpling Consensus (BaySAC) that determines the prior probabilities of pseudo-correspondences using a model-free strategy and updates the inlier probability of a correspondence based on a memorable form of Bayes' Theorem.

#### 1053 Block Adjustment of Satellite Imagery using RPCs with Virtual Strip Scenes

*Guo Zhang, Hongbo Pan, Deren Li, Xinming Tang, and Xiaoyong Zhu*

A method for the block adjustment of high-resolution satellite imagery using rational polynomial coefficients with virtual strip scenes.

#### 1061 Automatic Building Extraction Using a Fuzzy Active Contour Model

*Mostafa Kabolizade, Hamid Ebadi, and Mehdi Mokhtarzade*

The energy function of active contour model has been calculated using a fuzzy inference system.

#### 1069 CityGML Implementation Specifications for a Countrywide 3D Data Set: The Case of The Netherlands

*Jantien Stoter, George Vosselman, Christian Dahmen, Sander Oude Elberink, and Hugo Ledoux*

The specifications of a countrywide 3D data set for the Netherlands that extend and refine the OGC 3D standard "CityGML" as well as the best practices to generate and validate 3D data accordingly.



This image is a portion of the first Landsat 8 scene acquired May 12, 2013 (Path 107, Rows 70-71) in Western Australia. Geoscience Australia, a Landsat International Cooperator and a Landsat Science Team Member, produced this enhanced image. Water and land were masked, separately enhanced, and then reassembled.

The water patterns are the result of an RGB display of the Landsat 8 red, blue, and ultra-blue bands (bands 4, 2, 1) and the land is shown using SWIR, NIR, and green (bands 6, 5, 3). The resulting image displays impressive sediment and nutrient patterns in the tropical estuary area, and the complex patterns and conditions in the vegetated areas.

Sensor: L8 OLI

Acquisition Date: May 12, 2013

Path/Row: 107/70-71

Lat/Long: -14.870/128.350

Date Posted: 07/17/2013

This Enhanced Landsat 8 Image can be viewed at [landsat.usgs.gov/gallery\\_view](http://landsat.usgs.gov/gallery_view). The cover image was rotated 90 degrees but appears in its correct orientation above.

APPLICATIONS  
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