

COLUMNS

- Letter from the Executive Director
 Grids and Datums
Republic of India **200**
 Industry News **209**
 Book Review **212**
High Resolution Satellite Imagery **213**

ANNOUNCEMENTS

- Pecora 19 & ISPRS Commission I Symposium **197**
 Call for Papers **252**

DEPARTMENTS

- Certification **206**
 New Members **208**
 Region of the Month **208**
 Advertiser Index **212**
 Member Champions **214**
 Sustaining Members **215**
 Forthcoming Articles **228**
 Calendar **228**
 Who's Who in ASPRS **260**
 Instructions for Authors **282**
 Membership Application **284**

HIGHLIGHT ARTICLE

- 201** ASPRS Research on Quantifying the Geometric Quality of Lidar Data

Aparajithan Sampath, Hans K. Heidemann, Gregory L. Stensaas, and Jon B. Christopherson

INTERVIEW

- 207** Ryan Bowe



PEER-REVIEWED ARTICLES

- 217** Comparison of Simulated HypsIRI with Two Multispectral Sensors for Invasive Species Mapping

Aaryn D. Olsson and Jeffrey T. Morisette

AVIRIS-based simulations of HypsIRI, Landsat TM, and ASTER are used to compare the tradeoffs of spatial and spectral resolution to map an invasive species in the Sonoran Desert.

- 229** Comparison of Two Panoramic Sensor Models for Precise 3D Measurements

Shunping Ji, Yun Shi, Zhongchao Shi, Anmin Bao, Junli Li, Xiuxiao Yuan, Yulin Duan, and Ryosuke Shibasaki

Errors of the ideal panoramic camera model are analytically constructed, including both the in-perspective transformation of a mono-image and the co-planarity of stereo-pair.

- 239** Ensemble Learning with Multiple Classifiers and Polarimetric Features for Polarized SAR Image Classification

Alim. Samat, Peijun Du, Muhammad Hasan Ali Baig, Sumit Chakravarty, and Liang Cheng

A method to extract parking lot structures from an aerial orthophoto with high correctness, high completeness, and good geometric accuracy.

- 253** Mapping India On Large Scales - A Quick and Viable Solution

Krishna Kumar Naithani

A simplified approach for GPS assisted densification of leveling network for high-accuracy, large-scale mapping without a geoid.

- 261** Nested Regression-Based Optimal Selection (NRBOS) of Rational Polynomial Coefficients

Long Tengfei, Jiao Weili, and He Guojin

A new approach to simplify the rational function model (RFM) and estimate the rational polynomial coefficients (RPCs).

- 271** A Statistical Model Inspired by the National Map Accuracy Standard

F.J. Ariza-López, and J. Rodríguez-Avi

A statistical model inspired by the National Map Accuracy Standard that is applicable to 1D, 2D, and 3D cases on parametric and nonparametric statistical models that considers user's and producer's risk.



The cover image was taken by Valley Air Photos on August 16, 2012. Valley Air Photos was contracted by Access Geographic of Tempe, Arizona to support a RFP awarded by the Lower Elwha Klallam Tribe and the City of Port Angeles, Washington for orthophotography

and contour mapping. This color infrared image is of the Port Angeles Coast Guard Air Station and was collected with the Vexcel Ultracam X digital camera at a 3cm resolution. The geospatial information collected was used for watershed drainage and sea cliff erosion assessment, both critical issues along the Olympic Peninsula of Washington. The resulting images from this flight showcased the incredible detail and accuracy that Valley Air Photos achieves with the Ultracam X digital camera. Valley Air Photos is an aerial acquisition company based in Caldwell, ID. They have been providing quality, high accuracy, aerial photography for over 28 years. With an office in Caldwell, Idaho and Glendale, Arizona, Valley Air Photos serves clients across the US and Canada. For more information on Valley Air Photos and its services email: kevin@valleyairphotos.com or visit: www.valleyairphotos.com.