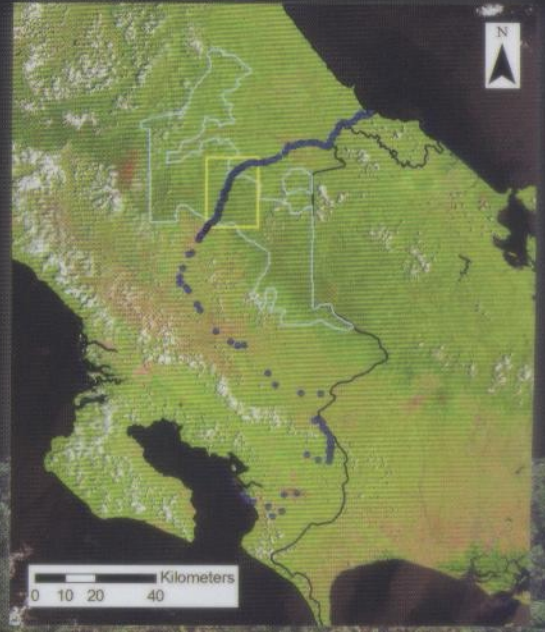


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PHOTOGRAMMETRIC ENGINEERING & REMOTE SENSING



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NEW!



This cloud forest canopy image was taken from our high point in the Talamancas mountains during a Costa Rican environmental traverse from the Pacific to the Atlantic. Our native guide had been following this ancient trail for over 40 years and he told us it was only the third time he had seen anything other than clouds from that vista point. We had an unprecedented two weeks without rain during the heart of the rainy season and his fear and discomfort at this drought was a grim reminder of climate change impacts across the world.

For more information, visit www.mountainscience.org or www.climberscience.com

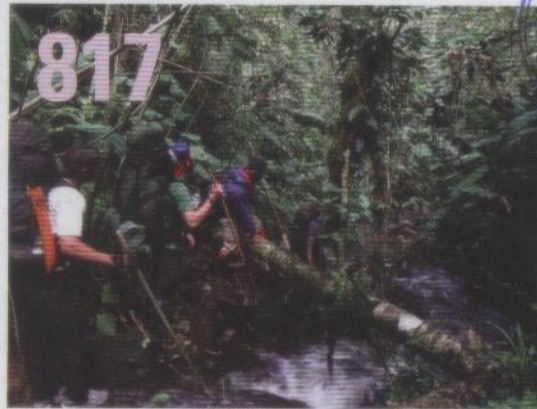
HIGHLIGHT ARTICLE

817 Remote Sensing and Ground-based Measurements Across a Remote Rainforest Transect

Rebecca J. Cole, John D. All, Carl G. Schmitt, and Marvin F. Lopez

INTERVIEW

823 Robert Burtch



PEER-REVIEWED ARTICLES

839 Generation of Pixel-Level SAR Image Time Series using a Locally Adaptive Matching Technique

Liang Cheng, Yafei Wang, Manchun Li, Lishan Zhong, and Jiechen Wang

A technique for the high-precision geometric registration of SAR images to construct pixel-level SAR image time series.

849 Spectral-Angle-based Laplacian Eigenmaps for Nonlinear Dimensionality Reduction of Hyperspectral Imagery

Lin Yan and Xutong Niu

The effects of distance metric selections in Laplacian Eigenmaps with respect to nonlinear dimensionality reduction of hyperspectral imagery, and a proposed spectral-angle-based Laplacian Eigenmaps method.

863 Generating Pit-free Canopy Height Models from Airborne Lidar

Anahita Khosravipour, Andrew K. Skidmore, Martin Isenburg, Tiejun Wang, and Yousif A. Hussin

Irregular height variations (also called data pits) are efficiently removed from a lidar-derived CHM by a new "pit-free" algorithm further improving the detection of individual trees in a forest.

873 A Hierarchical Building Detection Method for Very High Resolution Remotely Sensed Images Combined with DSM Using Graph Cut Optimization

Rongjun Qin and Wei Fang

An automatic method for building detection by fusing the height and spectral information of aerial orthophoto and DSM using the graph cut optimization framework

885 WorldView-2 High Spatial Resolution Improves Desert Invasive Plant Detection

Temuulen Sankey, Brett Dickson, Steve Sesnie, Ophelia Wang, Aaron Olsson, and Luke Zachmann

The potential for high spatial and spectral resolution WorldView-2 satellite imagery to detect an invasive plant species presence, cover, and biomass in the Sonoran Desert of southwestern Arizona.

895 Very High Resolution Plant Community Mapping at High Moor, Kushiro Wetland

Kunihiko Yoshino, Sayuri Kawaguchi, Fusayuki Kanda, Keiji Kushida, and Fuan Tsai

Rectifying and mosaicking aerial photos using a sufficient number of ground control points and interpreting plant communities to delineate a wetland plant community map using an object-based segmentation method.

APPLICATIONS PAPER