
PE&RS

Photogrammetric Engineering Remote Sensing

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Image Processing Approaches Using the Macintosh

The Macintosh fx was used with two low-cost software programs to enhance Landsat TM digital data for fracture mapping.

Arthur B. Busbey, Ken M. Morgan, and
R. Nowell Donovan1665

A Pilot Study Evaluating Ground Reference Data Collection Efforts for Use in Forest Inventory

Alternative measurement techniques were evaluated using contingency table analysis (i.e., error matrices).

Russell G. Congalton and Greg S. Biging1669

Analyst Variability in Labeling of Unsupervised Classifications

The work demonstrates the potential influence of analyst bias on what would otherwise seem to be a fairly objective method and suggests that controls for this subjectivity should be factored into experimental designs.

Kenneth C. McGwire1673

Scale Reduction and Maximum Information Loss of Different Information Categories

It can be shown that the content of information is greater for higher spatial resolution than for higher radiometric resolution.

Ulrich Wieczorek1679

Building Octree Representations of Three-Dimensional Objects in CAD/CAM by Digital Image Matching Techniques

An algorithm for reconstruction of surfaces with discontinuities using area-and feature-based digital image matching has been developed.

Rongxing Li1685

Image Matching Using Corresponding Point Measurements

Projective invariant relationships may be used to match non-metric photograph images having large perspective differences.

Nils N. Haag1693

Terrain Tracking for Lander Guidance Using Binary Phase-Only Spatial Filters

Testbed results of the accuracy with which a site may be tracked from orbit to landing, and the maximum scale, translation, and rotation which can be tolerated between subsequent images, are presented.

Max B. Reid and Butler P. Hine1699

PE&RS

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COVER IMAGE—A digital merge of several different datasets, developed by Hammon, Jensen, Wallen & Associates, Oakland, California. The three-dimensional shaded relief portion of the image (ocean) represented by shades of blues, where dark blue areas are the deepest surfaces. Waves, breakwaters, piers, and kelp were added to the image to provide reality and texture by algebraically merging the color elevation model with SPOT satellite imagery. The land was created by merging two panchromatic and two multispectral SPOT scenes, recorded on 2 June 1990. Natural color was developed by creating a blue channel for the multispectral data using a custom algorithm.

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