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Destriping of Landsat MSS Images by Filtering Techniques

Because the striping in MSS images can be regarded as a periodic noise and also identified in the power spectrum, it is possible to design an FIR filter in the spatial domain which performs the same processing as does a notch filter in the frequency domain.

Jeng-Jong Pan and Chein-I Chang1417

A Technique for the Reduction of Banding in Landsat Thematic Mapper Images

The technique involves passing a one-dimensional kernel—developed from the statistics of the banding pattern and based on the Wiener filter—over the data set.

Dennis L. Helder, Bruce K. Quirk, and Joy J. Hood1425

Mapping of Air Pollution Using SPOT Satellite Data

Aerosol optical depth can be approximated by a relative calibration procedure, i.e., radiometric comparison of the satellite images indicating pollution conditions with a reference image acquired under clear atmospheric conditions.

Nicolas Sifakis and Pierre-Yves Deschamps1433

Interactive Boundary Delineation of Agricultural Lands Using Graphics Workstations

A software procedure was developed to compile and edit agricultural strata boundaries on an image processing workstation with Thematic Mapper and Digital Line Graph data.

Thomas D. Cheng, Gary L. Angelici, Robert E. Slye, and Matt Ma1439

Using Aerial Photography and Geographic Information Systems to Develop Databases for Pesticide Evaluations

Aerial photography and geographic information systems were used to develop databases which will later be used to evaluate small-mammal populations following the application of a pesticide.

James L. Smith, Jesse A. Logan, and Timothy G. Gregoire1447

Map Accuracy Assessment Using Line Intersect Sampling

A ratio of coincident boundary to total boundary is proposed as one measure of map accuracy.

A. K. Skidmore and B. J. Turner1453

On the Compensation for Chance Agreement in Image Classification Accuracy Assessment

The calculation of chance agreement in the kappa coefficient of agreement is discussed and kappa-like statistics which compensate for chance agreement only are illustrated.

Giles M. Foody1459

Modeling the Effect of Data Errors on Feature Extraction from Digital Elevation Models

The magnitudes and the spatial patterns of errors in a DEM significantly affected the results of the tested terrain analysis.

Jay Lee, Peter F. Fisher, and Peter K. Snyder1461

Remote Sensing and Tropical Deforestation: A Cautionary Note from the Philippines

Results of five surveys of forest/vegetation cover using remotely sensed data and undertaken in the past two decades have been disappointing.

David M. Kummer1469

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