

1990 SUBJECT INDEX

A

Abrams, Talbert

In Memoriam: Talbert Abrams. Thomas M. Schafer, Nov (No. 11): 1453.

Accuracy indices

Forum: Accuracy Assessment: Another User's Perspective. N. A. Campbell, Jan (No. 1): 60.

Aerial photographs

Assessing Permit Compliance in Residential Areas Using Color 35-mm Aerial Photography. William R. Niedzwiedz, Feb (No. 2): 207-210.

Detailed Urban Land-Use and Land-Cover Mapping Using Large Format Camera Photographs: An Evaluation. C. P. Lo and W. Edward Noble, Jr., Feb (No. 2): 197-206.

Scene Registration in Aerial Image Analysis. Frederic P. Perlant and David M. McKeown, Apr (No. 4): 481-493.

See also Space photographs

Aerial photography

Feature Article: Photographing Everest. Jerry D. Greer, Jan (No. 1): 110-116.

A Microcomputer-Based Camera Control System. R. J. Hall and P. Hiscocks, Apr (No. 4): 443-446.

Sample Surveys that Use Imagery with Varying Area Coverage. Leigh Harrington, Mark Rivard, William Zink, and Nancy Cobos, Feb (No. 2): 181-185.

Spatial Resolution Requirements for Automated Cartographic Road Extraction. Susan Benjamin and Leonard Gaydos, Jan (No. 1): 93-100.

Aerotriangulation

See Phototriangulation

Africa

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Frédéric Achard and François Blasco, Oct (No. 10): 1359-1357.

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Sipi Jaakkola, Oct (No. 10): 1355-1365.

See also names of specific countries

Agriculture

AVHRR Monitoring of U. S. Crops During the 1988 Drought. William L. Teng, Aug (No. 8): 1143-1146.

Conversion of Automated Geographic Data to Decision-Making Information. Stephen J. Ventura, Apr (No. 4): 511-516.

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Optimum Band Selection for Supervised Classification of Multispectral Data. P. W. Mausel, W. J. Kramber, and J. K. Lee, Jan (No. 1): 55-60.

A Window-Based Technique for Combining Landsat Thematic Mapper Thermal Data with Higher-Resolution Multispectral Data over Agricultural Lands. M. Susan Moran, Mar (No. 3): 337-342.

Amazon Basin

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Sipi Jaakkola, Oct (No. 10): 1355-1365.

Mapping Continental-Scale Biomass Burning and Smoke Palls over the Amazon Basin as Observed from the Space Shuttle. Michael R. Helfert and Kamlesh P. Lulla, Oct (No. 10): 1367-1373.

American Society for Photogrammetry & Remote Sensing, new sustaining members

Hammon, Jensen, Wallen & Associates. Oct (No. 10): 1337.

Antenucci, John

PE&RS Interview: John Antenucci. Don Hemenway, Nov (No. 11): 1537-1547.

Arizona

Hyperspherical Direction Cosine Transformation for Separation of Spectral and Illumination Information in Digital Scanner Data. Gregory W. Pouch and David J. Campagna, Apr (No. 4): 475-479.

Artificial intelligence

LOBSTER: Combining AI and Database Techniques for GIS. Max J. Egenhofer and Andrew U. Frank, Jun (No. 6): 919-926.

Artificial neural networks

Artificial Neural Network Classification Using a Minimal Training Set: Comparison to Conventional Supervised Classification. George F. Hepner, Thomas Logan, Niles Ritter, and Nevin Bryant, Apr (No. 4): 469-473.

Assessing Permit Compliance in Residential Areas Using Color 35-mm Aerial Photography. William R. Niedzwiedz, Feb (No. 2): 207-210.

Australia

Utility of Landsat Thematic Mapper Data for Mapping Site Productivity in Tropical Moist Forests. Jerome K. Vanclay and Robert A. Preston, Oct (No. 10): 1383-1388.

AVHRR

AVHRR Monitoring of U. S. Crops During the 1988 Drought. William L. Teng, Aug (No. 8): 1143-1146.

AVHRR, data applications

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Frédéric Achard and François Blasco, Oct (No. 10): 1359-1357.

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Sipi Jaakkola, Oct (No. 10): 1355-1365.

B

Bangladesh

The Derivation of a Sub-Canopy Digital Terrain Model of a Flooded Forest Using Synthetic Aperture Radar. Marc Lee Imhoff and Dean B. Gesch, Aug (No. 8): 1155-1162.

Beazley, Jon S.

Honorary Membership Award: Citation for Jon S. Beazley. Jul (No. 7): 1005-1006.

Belgium

Assessing the Value of Monotemporal SPOT-1 Imagery for Forestry Applications Under Flemish Conditions. F. C. Borry, B. P. De Roover, R. R. De Wulf, and R. E. Goossens, Aug (No. 8): 1147-1153.

Biomass burning. See Fires

Botswana

The Development and Causes of Range Degradation Features in Southeast Botswana Using Multi-Temporal Landsat MSS Imagery. Susan Ringrose, Wilma Matheson, Faith Tempest, and Timothy Boyle, Sep (No. 9): 1253-1262.

Bundle adjustment

Counting the Errors: Presentation of Aerotriangulation Residuals for Easy Evaluation. Gerry Salsig, May (No. 5): 627-629.

Multi-Model Stereo Restitution. Keld S. Dueholm, Feb (No. 2): 239-242.

Burns, Joseph S.

Honorary Membership Award: Citation for Joseph P. Burns. Jul (No. 7): 1007-1009.

C

California

Information Analysis of a Spatial Database for Ecological Land Classification. Frank W. Davis and Jeff Dozier, May (No. 5): 605-613.

Spatial Autocorrelation of Wildfire Distribution in the Idyllwild Quadrangle, San Jacinto Mountain, California. Yue-Hong Chou, Richard A. Minnich, Lucy A. Salazar, Jeanne D. Power, and Raymond J. Dezzani, Nov (No. 11): 1507-1513.

Spatial Resolution Requirements for Automated Cartographic Road Extraction. Susan Benjamin and Leonard Gaydos, Jan (No. 1): 93-100.

Using Thematic Mapper Imagery to Examine Forest Understory. Janine M. Stenback and Russell G. Congalton, Sep (No. 9): 1285-1290.

Cameras, large-format

Detailed Urban Land-Use and Land-Cover Mapping Using Large Format Camera Photographs: An Evaluation. C. P. Lo and W. Edward Noble, Jr., Feb (No. 2): 197-206.

Canada

An Assessment of Some Factors Influencing Multispectral Land-Cover Classification. Peng Gong and Philip J. Howarth, May (No. 5): 597-603.

A Microcomputer-Based Camera Control System. R. J. Hall and P. Hiscocks, Apr (No. 4): 443-446.

SPOT PLA Photographic Image Processing. J. Ronald Eyton, Aug (No. 8): 1129-1134.

Synergism of Synthetic Aperture Radar and Visible/Infrared Data for Forest Type Discrimination. D. G. Leckie, Sep (No. 9): 1237-1246.

The Use of Structural Information for Improving Land-Cover Classification Accuracies at the Rural-Urban Fringe. Peng Gong and Philip J. Howarth, Jan (No. 1): 67-73.

Cartography. See Mapping

Classification techniques

A Multisensor Approach to Sea Ice Classification for the Validation of DMSP-SSM/I Passive Microwave Derived Sea Ice Products. K. Stefan and A. J. Schweiger, Jan. (No. 1): 75-82.

See also Image classification; Landcover classification

Color coordinate systems

IHS Transform for the Integration of Radar Imagery with other Remotely Sensed Data. Jeff R. Harris, Richard Murray, and Tom Hirose, Dec (No. 12): 1631-1641.

Computer languages

A C-Extension for Rule-Based Image Classification Systems. Gerhard Mehlau and Robert A. Schowengerdt, Jun (No. 6): 887-892.

LOBSTER: Combining AI and Database Techniques for GIS. Max J. Egenhofer and Andrew U. Frank, Jun (No. 6): 919-926.

Computer programming

AMOEBAs Clustering Revisited. Jack Bryant, Jan (No. 1): 41-47.

Costa Rica

Estimation of Tropical Forest Canopy Temperatures, Thermal Response Numbers, and Evapotranspiration Using an Aircraft-Based Thermal Sensor. Jeffrey C. Luvall, Diana Lieberman, Milton Lieberman, Gary S. Hartshorn, and Rodolfo Peralta, Oct (No. 10): 1393-1401.

Geocoding and Stereo Display of Tropical Forest Multisensor Datasets. R. Welch, T. R. Jordan, and J. C. Luvall, Oct (No. 10): 1389-1392.

D

Data acquisition

Design of a Global Tropical Forest Resources Assessment. K. D. Singh, Oct (No. 10): 1353-1354.

A Prototype Decision Guide and Audit Log for Preparation of Spatial Databases. Mathew Krogulecki, Apr (No. 4): 505-509.

Data compression

Data Compression in Digitized Lines. Khagendra Thapa, Apr (No. 4): 517-518.

Data integration

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Stephen J. Walsh, James W. Cooper, Ian E. Von Essen, and Kenneth R. Galager, Aug (No. 8): 1135-1141.

Integrating Spatial Data: A User's Perspective. Joseph M. Piwowar and Ellsworth F. LeDrew, Nov (No. 11): 1497-1502.

Integrating Topographic Data with Remote Sensing for Land-Cover Classification. Lucas L. F. Janssen, Marijke N. Jaarsma, and Erik T. M. van der Linden, Nov (No. 11): 1503-1506.

The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. W. Joseph Carper, Thomas M. Lillesand, and Ralph W. Kiefer, Apr (No. 4): 459-467.

Decisionmaking

Conversion of Automated Geographic Data to Decision-Making Information. Stephen J. Ventura, Apr (No. 4): 511-516.

A Prototype Decision Guide and Audit Log for Preparation of Spatial Databases. Mathew Krogulecki, Apr (No. 4): 505-509.

Digital elevation models

Comparison of 7.5 Minute and 1-Degree Digital Elevation Models. Dennis L. Isaacson and William J. Ripple, Nov (No. 11): 1523-1527.

The Derivation of a Sub-Canopy Digital Terrain Model of a Flooded Forest Using Synthetic Aperture Radar. Marc Lee Imhoff and Dean B. Gesch, Aug (No. 8): 1155-1162.

Heighting Accuracy of SPOT. E. I. Theodossiou and I. J. Dowman, Dec (No. 12): 1643-1649.

Digital image display

AMOEBAs Clustering Revisited. Jack Bryant, Jan (No. 1): 41-47.

Drainage patterns

The Development of a Knowledge-Based Expert System for Analysis of Drainage Patterns. Fabian C. Hadipriono, John G. Lyon, Thomas Li W. H., and Demetre P. Argialas, Jun (No. 6): 905-909.

See also Water resources

Drought

AVHRR Monitoring of U. S. Crops During the 1988 Drought. William L. Teng, Aug (No. 8): 1143-1146.

See also Water resources

E

Eichler, John Oran

In Memoriam: John Oran Eichler. Harry Tubis, Mar (No. 3): 370.

Eigenvector analysis

Optimum Band Selection for Supervised Classification of Multispectral Data. P. W. Mausel, W. J. Kramber, and J. K. Lee, Jan (No. 1): 55-60.

Error propagation techniques

Decision Considerations Arising from Error Propagation through Belief Calculations. Jeffrey L. Kretech and Edward M. Mikhail, Jun (No. 6): 927-931.

F

FAO Forest Resources Assessment 1990 Project

Design of a Global Tropical Forest Resources Assessment. K. D. Singh, Oct (No. 10): 1353-1354.

Fires

Assessment of Vegetation Change in a Fire-Altered Landscape. Mark E. Jakubauskas, Kamlesh P. Lulla, and Paul W. Mausel, Mar (No. 3): 371-377.

Mapping Continental-Scale Biomass Burning and Smoke Palls over the Amazon Basin as Observed from the Space Shuttle. Michael R. Helfert and Kamlesh P. Lulla, Oct (No. 10): 1367-1373.

Spatial Autocorrelation of Wildfire Distribution in the Idyllwild Quadrangle, San Jacinto Mountain, California. Yue-Hong Chou, Richard A. Minnich, Lucy A. Salazar, Jeanne D. Power, and Raymond J. Dezzani, Nov (No. 11): 1507-1513.

Florida

Evaluation of Thematic Map Accuracy in a Land-Use and Land-Cover Mapping Program. Steven E. Dicks and Thomas H. C. Lo, Sep (No. 9): 1247-1252.

Forest fires. See Fires

Forestry

Assessing the Value of Monotemporal SPOT-1 Imagery for Forestry Applications Under Flemish Conditions. F. C. Borry, B. P. De Roover, R. R. De Wulf, and R. E. Goossens, Aug (No. 8): 1147-1153.

Assessment of Vegetation Change in a Fire-Altered Landscape. Mark E. Jakubauskas, Kamlesh P. Lulla, and Paul W. Mausel, Mar (No. 3): 371-377.

The Derivation of a Sub-Canopy Digital Terrain Model of a Flooded Forest Using Synthetic Aperture Radar. Marc Lee Imhoff and Dean B. Gesch, Aug (No. 8): 1155-1162.

Difference between Ecological Land Type Maps Produced Using GIS or Manual Cartographic Method. Kim. E. Lowell, Feb (No. 2): 169-173.

Remote Detection of Canopy Water Stress in Coniferous Forests Using the NS001 Thematic Mapper Simulator and Thermal Infrared Multispectral Scanner. Lars L. Pierce, Steven W. Running, and George A. Riggs, May (No. 5): 579-586.

Synergism of Synthetic Aperture Radar and Visible/Infrared Data for Forest Type Discrimination. D. G. Leckie, Sep (No. 9): 1237-1246.

Using Thematic Mapper Imagery to Examine Forest Understory. Janine M. Stenback and Russell G. Congalton, Sep (No. 9): 1285-1290.

See also Tropical forests

Fractals

Description and Measurement of Landsat TM Images Using Fractals. Nina Siu-Ngan Lam, Feb (No. 2): 187-195.

France

Development of Multiple Source Data Processing for Structural Analysis at a Regional Scale. Veronique Carrere, May (No. 5): 587-595.

Heighting Accuracy of SPOT. E. I. Theodossiou and I. J. Dowman, Dec (No. 12): 1643-1649.

G**Geocoding**

Geocoding and Stereo Display of Tropical Forest Multisensor Datasets. R. Welch, T. R. Jordan, and J. C. Luvall, Oct (No. 10): 1389-1392.

Geographic information systems (GIS)

PE&RS Interview: John Antenucci. Don Hemenway, Nov (No. 11): 1537-1547.

A Prototype Decision Guide and Audit Log for Preparation of Spatial Databases. Mathew Krogulecki, Apr (No. 4): 505-509.

Report: Federal Land and Geographic Information System Activities. Stephen J. Ventura, May (No. 5): 631-634.

A Retrospective Analysis of GIS Performance: The Umatilla Basin Revisited. Joseph H. Astroth, Jr., Judy Trujillo, and Gary E. Johnson, Mar (No. 3): 359-363.

Selecting a GIS for a National Water Management Authority. Jan J. Olivier, Peter H. Greenwood, Antony K. Cooper, David R. McPherson, and Rudolf Engelbrecht, Nov (No. 11): 1471-1475.

Geographic information systems, applications

An Automated, Objective Procedure for Selecting Representative Field Sample Sites. Steven D. Warren, Mark O. Johnson, William D. Goran, and Victor E. Diersing, Mar (No. 3): 333-335.

Application of SPOT Data for Regional Growth Analysis and Local Planning. Manfred Ehlers, Mark A. Jadcowski, R. Richard Howard, and David E. Brostuen, Feb (No. 2): 175-180.

Assessing Deforestation in the Guinea Highlands of West Africa Using Remote Sensing. Peter T. Gilruth, Charles F. Hutchinson, and Bademba Barry, Oct (No. 10): 1375-1382.

Assessment of Vegetation Change in a Fire-Altered Landscape. Mark E. Jakubauskas, Kamlesh P. Lulla, and Paul W. Mausel, Mar (No. 3): 371-377.

Automated Update of an Irrigated Lands GIS Using SPOT HRV Imagery. David W. Eckhardt, James P. Verdin, and Gordon R. Lyford, Nov (No. 11): 1515-1522.

Cartographic Modeling of Snow Avalanche Path Location within Glacier National Park, Montana. Stephen J. Walsh, David R. Butler, Daniel G. Brown, and Ling Bian, May (No. 5): 615-621.

Development of an Agricultural Land-Use GIS for Senegal Derived from

Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Difference between Ecological Land Type Maps Produced Using GIS or Manual Cartographic Method. Kim. E. Lowell, Feb (No. 2): 169-173.

Extending a GIS to Support Image-Based Map Revision. Eugene Derenyi and Richard Pollock, Nov (No. 11): 1493-1496.

Geographic information systems, applications

Landscape Changes in Nine Rural Counties in Georgia. Monica G. Turner, Mar (No. 3): 379-386.

Geographic information systems, applications

Conversion of Automated Geographic Data to Decision-Making Information. Stephen J. Ventura, Apr (No. 4): 511-516.

A GIS Approach to Land-Use Change Dynamics Detection. C. P. Lo and Robert L. Shipman, Nov (No. 11): 1483-1491.

Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Stephen J. Walsh, James W. Cooper, Ian E. Von Essen, and Kenneth R. Gallagher, Aug (No. 8): 1135-1141.

Integrating Topographic Data with Remote Sensing for Land-Cover Classification. Lucas L. F. Janssen, Marijke N. Jaarsma, and Erik T. M. van der Linden, Nov (No. 11): 1503-1506.

Interfacing Geographic Information Systems and Remote Sensing for Rural Land-Use Analysis. M. Duane Nellis, Kamlesh Lulla, and John Jensen, Mar (No. 3): 329-331.

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Sipi Jaakkola, Oct (No. 10): 1355-1365.

Spatial Autocorrelation of Wildfire Distribution in the Idyllwild Quadrangle, San Jacinto Mountain, California. Yue-Hong Chou, Richard A. Minnich, Lucy A. Salazar, Jeanne D. Power, and Raymond J. Dezzani, Nov (No. 11): 1507-1513.

Using Remote Sensing and GIS Technology to Help Adjudicate Idaho Water Rights. Anthony Morse, Thomas J. Zarriello, and William J. Kramber, Mar (No. 3): 365-370.

Geographic information systems, data acquisition

Mathematical Morphology: A Tool for Automated GIS Data Acquisition from Scanned Thematic Maps. Marc M. Ansoult, Pierre J. Soille, and Jean A. Loodts, Sep (No. 9): 1263-1271.

Geographic information systems, design

Framework for a Geographically Referenced Conservation Database: Case Study Nepal. Sean C. Ahearn, James L. David Smith, and Catherine Wee, Nov (No. 11): 1477-1481.

Integrating Spatial Data: A User's Perspective. Joseph M. Piowowar and Ellsworth F. LeDrew, Nov (No. 11): 1497-1502.

Geographic information systems, expert systems

A C-Extension for Rule-Based Image Classification Systems. Gerhard Mehlau and Robert A. Schowengerdt, Jun (No. 6): 887-892.

Computational Image Interpretation Models: An Overview and a Perspective. Demetre P. Argialas and Charles A. Harlow, Jun (No. 6): 871-886.

Delineating Road Structures on Satellite Imagery by a GIS-Guided Technique. J. Van Cleynenbreugel, F. Fierens, P. Suetens, and A. Oosterlinck, Jun (No. 6): 893-898.

Development and Implementation of a Knowledge-Based GIS Geological Engineering Map Production System. Jill J. Cress and Robin R.P. Deister, Nov (No. 11): 1529-1535.

Evolution of an Intelligent Information Fusion System. William J. Campbell and Robert F. Cromp, Jun (No. 6): 867-870.

Experiments with a Rule-Based System for Interpreting Linear Map Features. Tony Schenk and Ofer Ziberstein, Jun (No. 6): 911-917.

Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Lasse Moller-Jensen, Jun (No. 6): 899-904.

LOBSTER: Combining AI and Database Techniques for GIS. Max J. Egenhofer and Andrew U. Frank, Jun (No. 6): 919-926.

The Development of a Knowledge-Based Expert System for Analysis of

- Drainage Patterns. Fabian C. Hadipriono, John G. Lyon, Thomas Li W. H., and Demetre P. Argialas, Jun (No. 6): 905-909.
- Geology**
Development of Multiple Source Data Processing for Structural Analysis at a Regional Scale. Veronique Carrere, May (No. 5): 587-595.
- IHS Transform for the Integration of Radar Imagery with other Remotely Sensed Data. Jeff R. Harris, Richard Murray, and Tom Hirose, Dec (No. 12): 1631-1641.
- Georgia**
Landscape Changes in Nine Rural Counties in Georgia. Monica G. Turner, Mar (No. 3): 379-386.
- GERIS scanner, data applications**
Mineral Mapping at Cuprite, Nevada with a 63-Channel Imaging Spectrometer. F. A. Kruse, K. S. Kierein-Young, and J. W. Boardman, Jan (No. 1): 83-92.
- Germany**
Remote Detection of Canopy Water Stress in Coniferous Forests Using the NS001 Thematic Mapper Simulator and Thermal Infrared Multispectral Scanner. Lars L. Pierce, Steven W. Running, and George A. Riggs, May (No. 5): 579-586.
- Ground truthing**
An Automated, Objective Procedure for Selecting Representative Field Sample Sites. Steven D. Warren, Mark O. Johnson, William D. Goran, and Victor E. Diersing, Mar (No. 3): 333-335.
- Guinea**
Assessing Deforestation in the Guinea Highlands of West Africa Using Remote Sensing. Peter T. Gilruth, Charles F. Hutchinson, and Bademba Barry, Oct (No. 10): 1375-1382.
- H**
- Hawaii**
Lava Flow Surface Textures: SIR-B Radar Image Texture, Field Observations, and Terrain Measurements. Lisa R. Gaddis, Peter J. Mouginis-Mark, and Joan N. Hayashi, Feb (No. 2): 211-224.
- Heller, Robert C.**
In Memoriam: Robert C. Heller. Frederick P. Weber, Sep (No. 9): 1292.
- Hong Kong**
A GIS Approach to Land-Use Change Dynamics Detection. C. P. Lo and Robert L. Shipman, Nov (No. 11): 1483-1491.
- Hyperspherical coordinates**
Hyperspherical Direction Cosine Transformation for Separation of Spectral and Illumination Information in Digital Scanner Data. Gregory W. Pouch and David J. Campagna, Apr (No. 4): 475-479.
- I**
- Idaho**
Using Remote Sensing and GIS Technology to Help Adjudicate Idaho Water Rights. Anthony Morse, Thomas J. Zarriello, and William J. Kramber, Mar (No. 3): 365-370.
- Image analysis**
Computational Image Interpretation Models: An Overview and a Perspective. Demetre P. Argialas and Charles A. Harlow, Jun (No. 6): 871-886.
- Improving Remote Sensing Image Analysis through Fuzzy Information Representation. Fangju Wang, Aug (No. 8): 1163-1169.
- Image classification**
AMOEBA Clustering Revisited. Jack Bryant, Jan (No. 1): 41-47.
- Artificial Neural Network Classification Using a Minimal Training Set: Comparison to Conventional Supervised Classification. George F. Hepner, Thomas Logan, Niles Ritter, and Nevin Bryant, Apr (No. 4): 469-473.
- A C-Extension for Rule-Based Image Classification Systems. Gerhard Mehdau and Robert A. Schowengerdt, Jun (No. 6): 887-892.
- Computational Image Interpretation Models: An Overview and a Perspective. Demetre P. Argialas and Charles A. Harlow, Jun (No. 6): 871-886.
- Hyperspherical Direction Cosine Transformation for Separation of Spectral and Illumination Information in Digital Scanner Data. Gregory W. Pouch and David J. Campagna, Apr (No. 4): 475-479.
- Improving Remote Sensing Image Analysis through Fuzzy Information Representation. Fangju Wang, Aug (No. 8): 1163-1169.
- Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Lasse Moller-Jensen, Jun (No. 6): 899-904.
- A New Statistical Approach for Texture Analysis. Li Wang and D. C. He, Jan (No. 1): 61-66.
- Optimum Band Selection for Supervised Classification of Multispectral Data. P. W. Mausel, W. J. Kramber, and J. K. Lee, Jan (No. 1): 55-60.
- Using Thematic Mapper Imagery to Examine Forest Understory. Janine M. Stenback and Russell G. Congalton, Sep (No. 9): 1285-1290.
- Image coordinates**
The Enlarger-Digitizer Approach: Accuracy and Reliability. Wolfgang Faig, Tian-yuan Shih, and Gang Deng, Feb (No. 2): 243-246.
- Image enhancement**
Adaptive Box Filters for Removal of Random Noise from Digital Images. Eric M. Eliason and Alfred S. McEwen, Apr (No. 4): 453-458.
- Applications of Digital Image Processing to Photoelastic Stress Analysis. Scott L. Huang, Apr (No. 4): 495-499.
- Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Stephen J. Walsh, James W. Cooper, Ian E. Von Essen, and Kenneth R. Gallagher, Aug (No. 8): 1135-1141.
- Precision Rectification of SPOT Imagery. Korbjorn Westin, Feb (No. 2): 247-253.
- Techniques for Noise Removal and Registration of TIMS DATA. Susanne Hummer-Miller, Jan (No. 1): 49-53.
- The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. W. Joseph Carper, Thomas M. Lillesand, and Ralph W. Kiefer, Apr (No. 4): 459-467.
- A Window-Based Technique for Combining Landsat Thematic Mapper Thermal Data with Higher-Resolution Multispectral Data over Agricultural Lands. M. Susan Moran, Mar (No. 3): 337-342.
- Image enhancement, edge sharpening techniques**
Differentiator Design and Performance for Edge Sharpening. Jeng-Jong Pan and Julia O. Dominique, May (No. 5): 573-578.
- SPOT PLA Photographic Image Processing. J. Ronald Eyton, Aug (No. 8): 1129-1134.
- Image interpretation**
Computational Image Interpretation Models: An Overview and a Perspective. Demetre P. Argialas and Charles A. Harlow, Jun (No. 6): 871-886.
- See also Photographic interpretation
- Image processing**
AMOEBA Clustering Revisited. Jack Bryant, Jan (No. 1): 41-47.
- Automated Update of an Irrigated Lands GIS Using SPOT HRV Imagery. David W. Eckhardt, James P. Verdin, and Gordon R. Lyford, Nov (No. 11): 1515-1522.
- Decision Considerations Arising from Error Propagation through Belief Calculations. Jeffrey L. Kretech and Edward M. Mikhail, Jun (No. 6): 927-931.
- Development of Multiple Source Data Processing for Structural Analysis at a Regional Scale. Veronique Carrere, May (No. 5): 587-595.
- Hyperspherical Direction Cosine Transformation for Separation of Spectral and Illumination Information in Digital Scanner Data. Gregory W. Pouch and David J. Campagna, Apr (No. 4): 475-479.
- Landsat Thematic Mapper Data Production: A History of Bulk Image Processing. Bill P. Clark, Apr (No. 4): 447-451.
- A Multisensor Approach to Sea Ice Classification for the Validation of DMSP-SSM/I Passive Microwave Derived Sea Ice Products. K. Stefan and A. J. Schweiger, Jan. (No. 1): 75-82.
- A New Statistical Approach for Texture Analysis. Li Wang and D. C. He, Jan (No. 1): 61-66.

Quality Color Composite Image Display Using Low Cost Equipment. Salvador Diaz-Cayeros, Dec (No. 12): 1625-1629.

A Window-Based Technique for Combining Landsat Thematic Mapper Thermal Data with Higher-Resolution Multispectral Data over Agricultural Lands. M. Susan Moran, Mar (No. 3): 337-342.

Image processing, applications

Applications of Digital Image Processing to Photoelastic Stress Analysis. Scott L. Huang, Apr (No. 4): 495-499.

Imaging spectrometers, data applications

Mineral Mapping at Cuprite, Nevada with a 63-Channel Imaging Spectrometer. F. A. Kruse, K. S. Kierein-Young, and J. W. Boardman, Jan (No. 1): 83-92.

India

Spectral Reflectance Relationships to Turbidity Generated by Different Clay Materials. D. S. Bhargava and Dejene W. Mariam, Feb (No. 2): 225-229.

Infrared radiance

Synergism of Synthetic Aperture Radar and Visible/Infrared Data for Forest Type Discrimination. D. G. Leckie, Sep (No. 9): 1237-1246.

International Society for Photogrammetry & Remote Sensing

International Society for Photogrammetry and Remote Sensing, Jul (No. 7): 999.

Irrigation

Automated Update of an Irrigated Lands GIS Using SPOT HRV Imagery. David W. Eckhardt, James P. Verdin, and Gordon R. Lyford. Nov (No. 11): 1515-1522.

A Retrospective Analysis of GIS Performance: The Umatilla Basin Revisited. Joseph H. Astroth, Jr., Judy Trujillo, and Gary E. Johnson, Mar (No. 3): 359-363.

See also Water resources

L

Land-use analysis

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Difference between Ecological Land Type Maps Produced Using GIS or Manual Cartographic Method. Kim. E. Lowell, Feb (No. 2): 169-173.

A GIS Approach to Land-Use Change Dynamics Detection. C. P. Lo and Robert L. Shipman, Nov (No. 11): 1483-1491.

Interfacing Geographic Information Systems and Remote Sensing for Rural Land-Use Analysis. M. Duane Nellis, Kamlesh Lulla, and John Jensen, Mar (No. 3): 329-331.

Landscape Changes in Nine Rural Counties in Georgia. Monica G. Turner, Mar (No. 3): 379-386.

Land-use planning

Application of SPOT Data for Regional Growth Analysis and Local Planning. Manfred Ehlers, Mark A. Jadcowski, R. Richard Howard, and David E. Brostuen, Feb (No. 2): 175-180.

Landcover

Application of SPOT Data for Regional Growth Analysis and Local Planning. Manfred Ehlers, Mark A. Jadcowski, R. Richard Howard, and David E. Brostuen, Feb (No. 2): 175-180.

Landcover classification

Artificial Neural Network Classification Using a Minimal Training Set: Comparison to Conventional Supervised Classification. George F. Hepner, Thomas Logan, Niles Ritter, and Nevin Bryant, Apr (No. 4): 469-473.

Assessing the Value of Monotemporal SPOT-1 Imagery for Forestry Applications Under Flemish Conditions. F. C. Borry, B. P. De Roover, R. R. De Wulf, and R. E. Goossens, Aug (No. 8): 1147-1153.

An Assessment of Some Factors Influencing Multispectral Land-Cover Classification. Peng Gong and Philip J. Howarth, May (No. 5): 597-603.

Assessment of Vegetation Change in a Fire-Altered Landscape. Mark E. Jakubauskas, Kamlesh P. Lulla, and Paul W. Mausel, Mar (No. 3): 371-377.

Information Analysis of a Spatial Database for Ecological Land Classification. Frank W. Davis and Jeff Dozier, May (No. 5): 605-613.

Integrating Topographic Data with Remote Sensing for Land-Cover Classification. Lucas L. F. Janssen, Marijke N. Jaarsma, and Erik T. M. van der Linden, Nov (No. 11): 1503-1506.

Synergism of Synthetic Aperture Radar and Visible/Infrared Data for Forest Type Discrimination. D. G. Leckie, Sep (No. 9): 1237-1246.

The Development and Causes of Range Degradation Features in Southeast Botswana Using Multi-Temporal Landsat MSS Imagery. Susan Ringrose, Wilma Matheson, Faith Tempest, and Timothy Boyle, Sep (No. 9): 1253-1262.

The Use of Structural Information for Improving Land-Cover Classification Accuracies at the Rural-Urban Fringe. Peng Gong and Philip J. Howarth, Jan (No. 1): 67-73.

Using Remote Sensing and GIS Technology to Help Adjudicate Idaho Water Rights. Anthony Morse, Thomas J. Zariello, and William J. Kramer, Mar (No. 3): 365-370.

Landsat

Landsat Update. Apr (No. 4): 434.

An Operational Earth Mapping and Monitoring Satellite System: A Proposal for Landsat 7. Alden P. Colvocoresses, May (No. 5): 569-571.

Landsat multispectral scanner (MSS), data applications

Using Remote Sensing and GIS Technology to Help Adjudicate Idaho Water Rights. Anthony Morse, Thomas J. Zariello, and William J. Kramer, Mar (No. 3): 365-370.

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

The Development and Causes of Range Degradation Features in Southeast Botswana Using Multi-Temporal Landsat MSS Imagery. Susan Ringrose, Wilma Matheson, Faith Tempest, and Timothy Boyle, Sep (No. 9): 1253-1262.

Landsat multispectral scanner (MSS), imagery

Forum: Comparison of Landsat MSS Pixel Array Sizes for Estimating Water Quality. Michael H. Ames, Jan (No. 1): 92.

AMOEBa Clustering Revisited. Jack Bryant, Jan (No. 1): 41-47.

Landsat thematic mapper (TM), data applications

Integrating Topographic Data with Remote Sensing for Land-Cover Classification. Lucas L. F. Janssen, Marijke N. Jaarsma, and Erik T. M. van der Linden, Nov (No. 11): 1503-1506.

Using Thematic Mapper Imagery to Examine Forest Understory. Janine M. Stenback and Russell G. Congalton, Sep (No. 9): 1285-1290.

Utility of Landsat Thematic Mapper Data for Mapping Site Productivity in Tropical Moist Forests. Jerome K. Vanclay and Robert A. Preston, Oct (No. 10): 1383-1388.

Landsat thematic mapper (TM), imagery

Description and Measurement of Landsat TM Images Using Fractals. Nina Siu-Ngan Lam, Feb (No. 2): 187-195.

Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Stephen J. Walsh, James W. Cooper, Ian E. Von Essen, and Kenneth R. Galager, Aug (No. 8): 1135-1141.

Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Lasse Moller-Jensen, Jun (No. 6): 899-904.

Landsat Thematic Mapper Data Production: A History of Bulk Image Processing. Bill P. Clark, Apr (No. 4): 447-451.

A Window-Based Technique for Combining Landsat Thematic Mapper Thermal Data with Higher-Resolution Multispectral Data over Agricultural Lands. M. Susan Moran, Mar (No. 3): 337-342.

Linear features

Delineating Road Structures on Satellite Imagery by a GIS-Guided Technique. J. Van Cleynenbreugel, F. Fierens, P. Suetens, and A. Oosterlinck, Jun (No. 6): 893-898.

Development of Multiple Source Data Processing for Structural Analysis at a Regional Scale. Veronique Carrere, May (No. 5): 587-595.

Experiments with a Rule-Based System for Interpreting Linear Map Features. Tony Schenk and Ofer Ziberstein, Jun (No. 6): 911-917.

Spatial Resolution Requirements for Automated Cartographic Road Extraction. Susan Benjamin and Leonard Gaydos, Jan (No. 1): 93-100.

See also Roads

M

Maine

Application of SPOT Data for Regional Growth Analysis and Local Planning. Manfred Ehlers, Mark A. Jadcowski, R. Richard Howard, and David E. Brostuen, Feb (No. 2): 175-180.

Map accuracy

Evaluation of Thematic Map Accuracy in a Land-Use and Land-Cover Mapping Program. Steven E. Dicks and Thomas H. C. Lo, Sep (No. 9): 1247-1252.

Forum: Accuracy Assessment: Another User's Perspective. N. A. Campbell, Jan (No. 1): 60.

Mapping

Extending a GIS to Support Image-Based Map Revision. Eugene Derenyi and Richard Pollock, Nov (No. 11): 1493-1496.

Mapping, geological

Development and Implementation of a Knowledge-Based GIS Geological Engineering Map Production System. Jill J. Cress and Robin R.P. Deister, Nov (No. 11): 1529-1535.

Mineral Mapping at Cuprite, Nevada with a 63-Channel Imaging Spectrometer. F. A. Kruse, K. S. Kierein-Young, and J. W. Boardman, Jan (No. 1): 83-92.

Multi-Model Stereo Restitution. Keld S. Dueholm, Feb (No. 2): 239-242.

Mapping, land-use

Evaluation of Thematic Map Accuracy in a Land-Use and Land-Cover Mapping Program. Steven E. Dicks and Thomas H. C. Lo, Sep (No. 9): 1247-1252.

Mapping, landcover

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Frédéric Achard and François Blasco, Oct (No. 10): 1359-1357.

Assessing Deforestation in the Guinea Highlands of West Africa Using Remote Sensing. Peter T. Gilruth, Charles F. Hutchinson, and Bademba Barry, Oct (No. 10): 1375-1382.

Attempting to Detect and Record Brushland in the Northeastern United States Using MSS Data: Schoharie County, N.Y., as a Case Study. Paul R. Baumann, Mar (No. 3): 387-391.

Detailed Urban Land-Use and Land-Cover Mapping Using Large Format Camera Photographs: An Evaluation. C. P. Lo and W. Edward Noble, Jr., Feb (No. 2): 197-206.

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Evaluation of Thematic Map Accuracy in a Land-Use and Land-Cover Mapping Program. Steven E. Dicks and Thomas H. C. Lo, Sep (No. 9): 1247-1252.

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Sipi Jaakkola, Oct (No. 10): 1355-1365.

Mapping, special-purpose

Difference between Ecological Land Type Maps Produced Using GIS or Manual Cartographic Method. Kim. E. Lowell, Feb (No. 2): 169-173.

Mapping Continental-Scale Biomass Burning and Smoke Palls over the Amazon Basin as Observed from the Space Shuttle. Michael R. Helfert and Kamlesh P. Lulla, Oct (No. 10): 1367-1373.

Utility of Landsat Thematic Mapper Data for Mapping Site Productivity in Tropical Moist Forests. Jerome K. Vanclay and Robert A. Preston, Oct (No. 10): 1383-1388.

Mapping, topographic

Characteristics of Remote Sensors for Mapping and Earth Science Applications. Donald L. Light, Dec (No. 12): 1613-1623.

Experiments with a Rule-Based System for Interpreting Linear Map Features. Tony Schenk and Ofer Ziberstein, Jun (No. 6): 911-917.

Spatial Resolution Requirements for Automated Cartographic Road Extraction. Susan Benjamin and Leonard Gaydos, Jan (No. 1): 93-100.

Massachusetts

Detailed Urban Land-Use and Land-Cover Mapping Using Large Format Camera Photographs: An Evaluation. C. P. Lo and W. Edward Noble, Jr., Feb (No. 2): 197-206.

Mathematical morphology

Mathematical Morphology: A Tool for Automated GIS Data Acquisition from Scanned Thematic Maps. Marc M. Ansoult, Pierre J. Soille, and Jean A. Loodts, Sep (No. 9): 1263-1271.

McNair, Arthur J.

Memorial Address: Arthur J. McNair. Edward M. Mikhail, Jul (No. 7): 1027-1031.

Michigan

Assessment of Vegetation Change in a Fire-Altered Landscape. Mark E. Jakubauskas, Kamlesh P. Lulla, and Paul W. Mausel, Mar (No. 3): 371-377.

Microcomputers. See Personal computers

Mineral exploration

Mineral Mapping at Cuprite, Nevada with a 63-Channel Imaging Spectrometer. F. A. Kruse, K. S. Kierein-Young, and J. W. Boardman, Jan (No. 1): 83-92.

Missouri

Difference between Ecological Land Type Maps Produced Using GIS or Manual Cartographic Method. Kim. E. Lowell, Feb (No. 2): 169-173.

Montana

Cartographic Modeling of Snow Avalanche Path Location within Glacier National Park, Montana. Stephen J. Walsh, David R. Butler, Daniel G. Brown, and Ling Bian, May (No. 5): 615-621.

Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Stephen J. Walsh, James W. Cooper, Ian E. Von Essen, and Kenneth R. Gallagher, Aug (No. 8): 1135-1141.

Moore, Roland H.

Memorial Address: Roland H. Moore. Henry M. Townsend, Jul (No. 7): 1033-1037.

Mount Everest

Feature Article: Photographing Everest. Jerry D. Greer, Jan (No. 1): 110-116.

Multiresolution digital data

The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. W. Joseph Carper, Thomas M. Lillesand, and Ralph W. Kiefer, Apr (No. 4): 459-467.

Multispectral imagery

The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. W. Joseph Carper, Thomas M. Lillesand, and Ralph W. Kiefer, Apr (No. 4): 459-467.

N

Nepal

Framework for a Geographically Referenced Conservation Database: Case Study Nepal. Sean C. Ahearn, James L. David Smith, and Catherine Wee, Nov (No. 11): 1477-1481.

Netherlands

Integrating Topographic Data with Remote Sensing for Land-Cover Classification. Lucas L. F. Janssen, Marijke N. Jaarsma, and Erik T. M. van der Linden, Nov (No. 11): 1503-1506.

Nevada

Automated Update of an Irrigated Lands GIS Using SPOT HRV Imagery. David W. Eckhardt, James P. Verdin, and Gordon R. Lyford, Nov (No. 11): 1515-1522.

Hyperspherical Direction Cosine Transformation for Separation of Spectral and Illumination Information in Digital Scanner Data. Gregory W. Pouch and David J. Campagna, Apr (No. 4): 475-479.

Mineral Mapping at Cuprite, Nevada with a 63-Channel Imaging

- Spectrometer. F. A. Kruse, K. S. Kierein-Young, and J. W. Boardman, Jan (No. 1): 83-92.
- Techniques for Noise Removal and Registration of TIMS DATA. Susanne Hummer-Miller, Jan (No. 1): 49-53.
- New York**
- Attempting to Detect and Record Brushland in the Northeastern United States Using MSS Data: Schoharie County, N.Y., as a Case Study. Paul R. Baumann, Mar (No. 3): 387-391.
- Experiments with a Rule-Based System for Interpreting Linear Map Features. Tony Schenk and Ofer Ziberstein, Jun (No. 6): 911-917.
- Noise filters**
- Adaptive Box Filters for Removal of Random Noise from Digital Images. Eric M. Eliason and Alfred S. McEwen, Apr (No. 4): 453-458.
- A New Statistical Approach for Texture Analysis. Li Wang and D. C. He, Jan (No. 1): 61-66.
- Techniques for Noise Removal and Registration of TIMS DATA. Susanne Hummer-Miller, Jan (No. 1): 49-53.

O

- Oregon**
- Comparison of 7.5 Minute and 1-Degree Digital Elevation Models. Dennis L. Isaacson and William J. Ripple, Nov (No. 11): 1523-1527.
- A Retrospective Analysis of GIS Performance: The Umatilla Basin Revisited. Joseph H. Astroth, Jr., Judy Trujillo, and Gary E. Johnson, Mar (No. 3): 359-363.

P

Personal computers

- A Microcomputer-Based General Photogrammetric System. P. A. Gagnon, J. P. Agnard, C. Nolette, and M. Boulianne, May (No. 5): 623-625.

Photogrammetrists

- A new Testing Procedure for Recruitment of Photogrammetrists. G. van den Brink, P. G. Schwartz, and G. J. van der Wildt, Apr (No. 4): 501-504.

Photogrammetry

- The Duality and Critical Condition in the Formulation and Decomposition of a Rotation Matrix. Tian-Yuan Shih, Aug (No. 8): 1173-1179.

- The Enlarger-Digitizer Approach: Accuracy and Reliability. Wolfgang Faig, Tian-yuan Shih, and Gang Deng, Feb (No. 2): 243-246.

- A Microcomputer-Based General Photogrammetric System. P. A. Gagnon, J. P. Agnard, C. Nolette, and M. Boulianne, May (No. 5): 623-625.

Photogrammetry, biomedical applications

- Simplified Remote Measurement of Three-Dimensional Surfaces: Application for Biomedical Engineering. N. Rosenberg, R. Zeltser, D. Elad, M. Sahar, J. M. Avidor, and S. Einav, Sep (No. 9): 1273-1280.

Photogrammetry, close-range

- Simplified Remote Measurement of Three-Dimensional Surfaces: Application for Biomedical Engineering. N. Rosenberg, R. Zeltser, D. Elad, M. Sahar, J. M. Avidor, and S. Einav, Sep (No. 9): 1273-1280.

Photogrammetry, industrial applications

- Coal Pile Inventory Using 35-mm Oblique Terrestrial Photogrammetry. Brian Huberty and Carl Anderson, Aug (No. 8): 1169-1171.

- Robot Location Using Single Views of Rectangular Shapes. Royal Lee, Po-Chaing Lu, and Wen-Hsiang Taai, Feb (No. 2): 231-238.

Photographic interpretation

- Cartographic Modeling of Snow Avalanche Path Location within Glacier National Park, Montana. Stephen J. Walsh, David R. Butler, Daniel G. Brown, and Ling Bian, May (No. 5): 615-621.

- A GIS Approach to Land Use Change Dynamics Detection. C. P. Lo and Robert L. Shipman, Nov (No. 11): 1483-1491.

- Scene Registration in Aerial Image Analysis. Frederic P. Perlant and David M. McKeown, Apr (No. 4): 481-493.

- Spatial Resolution Requirements for Automated Cartographic Road Extraction. Susan Benjamin and Leonard Gaydos, Jan (No. 1): 93-100.

Phototriangulation

- Counting the Errors: Presentation of Aerotriangulation Residuals for Easy Evaluation. Gerry Salsig, May (No. 5): 627-629.

Pixel array sizes

- Forum: Comparison of Landsat MSS Pixel Array Sizes for Estimating Water Quality. Michael H. Ames, Jan (No. 1): 92.

R

Radar imagery

- IHS Transform for the Integration of Radar Imagery with other Remotely Sensed Data. Jeff R. Harris, Richard Murray, and Tom Hirose, Dec (No. 12): 1631-1641.

Rainforests. See Tropical forests

Rangelands

- Aerospace Video Imaging Systems for Rangeland Management. J. H. Everitt, K. Lulla, D. E. Escobar, and A. J. Richardson, Mar (No. 3): 343-349.

- The Development and Causes of Range Degradation Features in South-east Botswana Using Multi-Temporal Landsat MSS Imagery. Susan Ringrose, Wilma Matheson, Faith Tempest, and Timothy Boyle, Sep (No. 9): 1253-1262.

Remote sensing

- Characteristics of Remote Sensors for Mapping and Earth Science Applications. Donald L. Light, Dec (No. 12): 1613-1623.

- Forum: Miss-Precis. Paul J. Curran, Mar (No. 3): 386.

- Interfacing Geographic Information Systems and Remote Sensing for Rural Land-Use Analysis. M. Duane Nellis, Kamlesh Lulla, and John Jensen, Mar (No. 3): 329-331.

- Landsat Update. Apr (No. 4): 434.

- An Operational Earth Mapping and Monitoring Satellite System: A Proposal for Landsat 7. Alden P. Colvocoresses, May (No. 5): 569-571.

- See also names of specific sensors.

Remote sensing, data applications

- Geocoding and Stereo Display of Tropical Forest Multisensor Datasets. R. Welch, T. R. Jordan, and J. C. Luvall, Oct (No. 10): 1389-1392.

- Assessing Deforestation in the Guinea Highlands of West Africa Using Remote Sensing. Peter T. Gilruth, Charles F. Hutchinson, and Bademba Barry, Oct (No. 10): 1375-1382.

- Remote Sensing of Tropical Forests: An Overview of Research and Applications Using Non-Photographic Sensors. Steven A. Sader, Thomas A. Stone, and Armond T. Joyce, Oct (No. 10): 1343-1351.

- Design of a Global Tropical Forest Resources Assessment. K. D. Singh, Oct (No. 10): 1353-1354.

- See also under names of specific sensors

Remote sensing, sensor data comparisons

- A Multisensor Approach to Sea Ice Classification for the Validation of DMSP-SSM/I Passive Microwave Derived Sea Ice Products. K. Stefan and A. J. Schweiger, Jan. (No. 1): 75-82.

Roads

- Delineating Road Structures on Satellite Imagery by a GIS-Guided Technique. J. Van Cleynebreugel, F. Fierens, P. Suetens, and A. Oosterlinck, Jun (No. 6): 893-898.

- See also Linear features

Robots

- Robot Location Using Single Views of Rectangular Shapes. Royal Lee, Po-Chaing Lu, and Wen-Hsiang Taai, Feb (No. 2): 231-238.

Rotation matrix

- The Duality and Critical Condition in the Formulation and Decomposition of a Rotation Matrix. Tian-Yuan Shih, Aug (No. 8): 1173-1179.

Rural areas

- Attempting to Detect and Record Brushland in the Northeastern United States Using MSS Data: Schoharie County, N.Y., as a Case Study. Paul R. Baumann, Mar (No. 3): 387-391.

- Interfacing Geographic Information Systems and Remote Sensing for Rural Land-Use Analysis. M. Duane Nellis, Kamlesh Lulla, and John Jensen, Mar (No. 3): 329-331.

Landscape Changes in Nine Rural Counties in Georgia. Monica G. Turner, Mar (No. 3): 379-386.

S

Scene registration

Scene Registration in Aerial Image Analysis. Frederic P. Perlant and David M. McKeown, Apr (No. 4): 481-493.

Sea ice

IHS Transform for the Integration of Radar Imagery with other Remotely Sensed Data. Jeff R. Harris, Richard Murray, and Tom Hirose, Dec (No. 12): 1631-1641.

A Multisensor Approach to Sea Ice Classification for the Validation of DMSP-SSM/I Passive Microwave Derived Sea Ice Products. K. Stefan and A. J. Schweiger, Jan. (No. 1): 75-82.

Senegal

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Shuttle imaging radar-B (SIR-B), data applications

The Derivation of a Sub-Canopy Digital Terrain Model of a Flooded Forest Using Synthetic Aperture Radar. Marc Lee Imhoff and Dean B. Gesch, Aug (No. 8): 1155-1162.

Lava Flow Surface Textures: SIR-B Radar Image Texture, Field Observations, and Terrain Measurements. Lisa R. Gaddis, Peter J. Mouginis-Mark, and Joan N. Hayashi, Feb (No. 2): 211-224.

Snow avalanches

Cartographic Modeling of Snow Avalanche Path Location within Glacier National Park, Montana. Stephen J. Walsh, David R. Butler, Daniel G. Brown, and Ling Bian, May (No. 5): 615-621.

Soils

Spectral Reflectance Relationships to Turbidity Generated by Different Clay Materials. D. S. Bhargava and Dejene W. Mariam, Feb (No. 2): 225-229.

South Africa

Selecting a GIS for a National Water Management Authority. Jan J. Olivier, Peter H. Greenwood, Antony K. Cooper, David R. McPherson, and Rudolf Engelbrecht, Nov (No. 11): 1471-1475.

Space photographs

Mapping Continental-Scale Biomass Burning and Smoke Palls over the Amazon Basin as Observed from the Space Shuttle. Michael R. Helfert and Kamlesh P. Lulla, Oct (No. 10): 1367-1373.

Special sensor microwave imager (SSM/I)

A Multisensor Approach to Sea Ice Classification for the Validation of DMSP-SSM/I Passive Microwave Derived Sea Ice Products. K. Stefan and A. J. Schweiger, Jan. (No. 1): 75-82.

Spectroradiometry

Spectral Reflectance Relationships to Turbidity Generated by Different Clay Materials. D. S. Bhargava and Dejene W. Mariam, Feb (No. 2): 225-229.

SPOT, data applications

Application of SPOT Data for Regional Growth Analysis and Local Planning. Manfred Ehlers, Mark A. Jadcowski, R. Richard Howard, and David E. Brostuen, Feb (No. 2): 175-180.

Assessing the Value of Monotemporal SPOT-1 Imagery for Forestry Applications Under Flemish Conditions. F. C. Borry, B. P. De Roover, R. R. De Wulf, and R. E. Goossens, Aug (No. 8): 1147-1153.

An Automated, Objective Procedure for Selecting Representative Field Sample Sites. Steven D. Warren, Mark O. Johnson, William D. Goran, and Victor E. Diersing, Mar (No. 3): 333-335.

Automated Update of an Irrigated Lands GIS Using SPOT HRV Imagery. David W. Eckhardt, James P. Verdin, and Gordon R. Lyford, Nov (No. 11): 1515-1522.

Delineating Road Structures on Satellite Imagery by a GIS-Guided Technique. J. Van Cleynebreugel, F. Fierens, P. Suetens, and A. Oosterlinck, Jun (No. 6): 893-898.

The Use of Structural Information for Improving Land-Cover Classification Accuracies at the Rural-Urban Fringe. Peng Gong and Philip J. Howarth, Jan (No. 1): 67-73.

SPOT, imagery

An Assessment of Some Factors Influencing Multispectral Land-Cover Classification. Peng Gong and Philip J. Howarth, May (No. 5): 597-603.

Differentiator Design and Performance for Edge Sharpening. Jeng-Jong Pan and Julia O. Dominique, May (No. 5): 573-578.

Heighting Accuracy of SPOT. E. I. Theodossiou and I. J. Dowman, Dec (No. 12): 1643-1649.

Precision Rectification of SPOT Imagery. Korbjorn Westin, Feb (No. 2): 247-253.

SPOT PLA Photographic Image Processing. J. Ronald Eyton, Aug (No. 8): 1129-1134.

The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. W. Joseph Carper, Thomas M. Lillesand, and Ralph W. Kiefer, Apr (No. 4): 459-467.

Statistics, cluster analysis

AMOEBa Clustering Revisited. Jack Bryant, Jan (No. 1): 41-47.

Statistics, least squares

Precision Rectification of SPOT Imagery. Korbjorn Westin, Feb (No. 2): 247-253.

Statistics, regression analysis

The Development and Causes of Range Degradation Features in South-east Botswana Using Multi-Temporal Landsat MSS Imagery. Susan Ringrose, Wilma Matheson, Faith Tempest, and Timothy Boyle, Sep (No. 9): 1253-1262.

Utility of Landsat Thematic Mapper Data for Mapping Site Productivity in Tropical Moist Forests. Jerome K. Vanclay and Robert A. Preston, Oct (No. 10): 1383-1388.

Statistics, sampling methods

An Assessment of Some Factors Influencing Multispectral Land-Cover Classification. Peng Gong and Philip J. Howarth, May (No. 5): 597-603.

An Automated, Objective Procedure for Selecting Representative Field Sample Sites. Steven D. Warren, Mark O. Johnson, William D. Goran, and Victor E. Diersing, Mar (No. 3): 333-335.

Evaluation of Thematic Map Accuracy in a Land-Use and Land-Cover Mapping Program. Steven E. Dicks and Thomas H. C. Lo, Sep (No. 9): 1247-1252.

Sample Surveys that Use Imagery with Varying Area Coverage. Leigh Harrington, Mark Rivard, William Zink, and Nancy Cobos, Feb (No. 2): 181-185.

Statistics, spatial autocorrelation

Spatial Autocorrelation of Wildfire Distribution in the Idyllwild Quadrangle, San Jacinto Mountain, California. Yue)Hong Chou, Richard A. Minnich, Lucy A. Salazar, Jeanne D. Power, and Raymond J. Dezzani, Nov (No. 11): 1507-1513.

Stereopairs

Geocoding and Stereo Display of Tropical Forest Multisensor Datasets. R. Welch, T. R. Jordan, and J. C. Luvall, Oct (No. 10): 1389-1392.

On the Duality of Relative Orientation. Tian-Yuan Shih, Sep (No. 9): 1281-1283.

Scene Registration in Aerial Image Analysis. Frederic P. Perlant and David M. McKeown, Apr (No. 4): 481-493.

Stereophotogrammetry

Mathematical Morphology: A Tool for Automated GIS Data Acquisition from Scanned Thematic Maps. Marc M. Ansoult, Pierre J. Soille, and Jean A. Loodts, Sep (No. 9): 1263-1271.

Strasser, Georg

In Memoriam: Georg Strasser. Gert E. Bormann, Mar (No. 3): 357.

Stress analysis

Applications of Digital Image Processing to Photoelastic Stress Analysis. Scott L. Huang, Apr (No. 4): 495-499.

Structural engineering

Applications of Digital Image Processing to Photoelastic Stress Analysis. Scott L. Huang, Apr (No. 4): 495-499.

Surface temperatures. See Temperatures

Synthetic aperture radar (SAR), data applications

Synergism of Synthetic Aperture Radar and Visible/Infrared Data for Forest Type Discrimination. D. G. Leckie, Sep (No. 9): 1237-1246.

T**Temperatures**

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Frédéric Achard and François Blasco, Oct (No. 10): 1359-1357.

Estimation of Tropical Forest Canopy Temperatures, Thermal Response Numbers, and Evapotranspiration Using an Aircraft-Based Thermal Sensor. Jeffrey C. Luvall, Diana Lieberman, Milton Lieberman, Gary S. Hartshorn, and Rodolfo Peralta, Oct (No. 10): 1393-1401.

Texas

Aerospace Video Imaging Systems for Rangeland Management. J. H. Everitt, K. Lulla, D. E. Escobar, and A. J. Richardson, Mar (No. 3): 343-349.

Optimum Band Selection for Supervised Classification of Multispectral Data. P. W. Mausel, W. J. Kramber, and J. K. Lee, Jan (No. 1): 55-60.

Texture analysis

Lava Flow Surface Textures: SIR-B Radar Image Texture, Field Observations, and Terrain Measurements. Lisa R. Gaddis, Peter J. Mouginis-Mark, and Joan N. Hayashi, Feb (No. 2): 211-224.

Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Lasse Moller-Jensen, Jun (No. 6): 899-904.

A New Statistical Approach for Texture Analysis. Li Wang and D. C. He, Jan (No. 1): 61-66.

Thailand

Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Lasse Moller-Jensen, Jun (No. 6): 899-904.

Thematic mapper simulator, data applications

Remote Detection of Canopy Water Stress in Coniferous Forests Using the NS001 Thematic Mapper Simulator and Thermal Infrared Multispectral Scanner. Lars L. Pierce, Steven W. Running, and George A. Riggs, May (No. 5): 579-586.

Thermal infrared multispectral scanner (TIMS), data applications

Estimation of Tropical Forest Canopy Temperatures, Thermal Response Numbers, and Evapotranspiration Using an Aircraft-Based Thermal Sensor. Jeffrey C. Luvall, Diana Lieberman, Milton Lieberman, Gary S. Hartshorn, and Rodolfo Peralta, Oct (No. 10): 1393-1401.

Remote Detection of Canopy Water Stress in Coniferous Forests Using the NS001 Thematic Mapper Simulator and Thermal Infrared Multispectral Scanner. Lars L. Pierce, Steven W. Running, and George A. Riggs, May (No. 5): 579-586.

Thermal infrared multispectral scanner (TIMS), imagery

Techniques for Noise Removal and Registration of TIMS DATA. Susanne Hummer-Miller, Jan (No. 1): 49-53.

Tropical forests

Assessing Deforestation in the Guinea Highlands of West Africa Using Remote Sensing. Peter T. Gilruth, Charles F. Hutchinson, and Bademba Barry, Oct (No. 10): 1375-1382.

Mapping Continental-Scale Biomass Burning and Smoke Palls over the Amazon Basin as Observed from the Space Shuttle. Michael R. Helfert and Kamlesh P. Lulla, Oct (No. 10): 1367-1373.

Utility of Landsat Thematic Mapper Data for Mapping Site Productivity in Tropical Moist Forests. Jerome K. Vanclay and Robert A. Preston, Oct (No. 10): 1383-1388.

Remote Sensing of Tropical Forests: An Overview of Research and Applications Using Non-Photographic Sensors. Steven A. Sader, Thomas A. Stone, and Armond T. Joyce, Oct (No. 10): 1343-1351.

Geocoding and Stereo Display of Tropical Forest Multisensor Datasets. R. Welch, T. R. Jordan, and J. C. Luvall, Oct (No. 10): 1389-1392.

Design of a Global Tropical Forest Resources Assessment. K. D. Singh, Oct (No. 10): 1353-1354.

Estimation of Tropical Forest Canopy Temperatures, Thermal Response

Numbers, and Evapotranspiration Using an Aircraft-Based Thermal Sensor. Jeffrey C. Luvall, Diana Lieberman, Milton Lieberman, Gary S. Hartshorn, and Rodolfo Peralta, Oct (No. 10): 1393-1401.

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Sipi Jaakkola, Oct (No. 10): 1355-1365.

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Frédéric Achard and François Blasco, Oct (No. 10): 1359-1357.

Estimation of Tropical Forest Canopy Temperatures, Thermal Response Numbers, and Evapotranspiration Using an Aircraft-Based Thermal Sensor. Jeffrey C. Luvall, Diana Lieberman, Milton Lieberman, Gary S. Hartshorn, and Rodolfo Peralta, Oct (No. 10): 1393-1401.

See also Forestry

U**United Nations. Food & Agriculture Organization**

Design of a Global Tropical Forest Resources Assessment. K. D. Singh, Oct (No. 10): 1353-1354.

United States government

Report: Federal Land and Geographic Information System Activities. Stephen J. Ventura, May (No. 5): 631-634.

Urban areas

Application of SPOT Data for Regional Growth Analysis and Local Planning. Manfred Ehlers, Mark A. Jankowski, R. Richard Howard, and David E. Brostuen, Feb (No. 2): 175-180.

Detailed Urban Land-Use and Land-Cover Mapping Using Large Format Camera Photographs: An Evaluation. C. P. Lo and W. Edward Noble, Jr., Feb (No. 2): 197-206.

A GIS Approach to Land-Use Change Dynamics Detection. C. P. Lo and Robert L. Shipman, Nov (No. 11): 1483-1491.

Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Lasse Moller-Jensen, Jun (No. 6): 899-904.

The Use of Structural Information for Improving Land-Cover Classification Accuracies at the Rural-Urban Fringe. Peng Gong and Philip J. Howarth, Jan (No. 1): 67-73.

Utah

An Automated, Objective Procedure for Selecting Representative Field Sample Sites. Steven D. Warren, Mark O. Johnson, William D. Goran, and Victor E. Diersing, Mar (No. 3): 333-335.

V**Vegetation indices**

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Frédéric Achard and François Blasco, Oct (No. 10): 1359-1357.

AVHRR Monitoring of U. S. Crops During the 1988 Drought. William L. Teng, Aug (No. 8): 1143-1146.

Video imagery

Optimum Band Selection for Supervised Classification of Multispectral Data. P. W. Mausel, W. J. Kramber, and J. K. Lee, Jan (No. 1): 55-60.

A Two-Channel Multiplex Video Remote Sensing System. Charles F. Hutchinson, Robert A. Schowengerdt, and L. Ralph Baker, Aug (No. 8): 1125-1128.

Video imagery, data applications

Aerospace Video Imaging Systems for Rangeland Management. J. H. Everitt, K. Lulla, D. E. Escobar, and A. J. Richardson, Mar (No. 3): 343-349.

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Stuart E. Marsh, James L. Walsh, and Charles F. Hutchinson, Mar (No. 3): 359-363.

Videoplotters

A Microcomputer-Based General Photogrammetric System. P. A. Gagnon, J. P. Agnard, C. Nolette, and M. Boulianne, May (No. 5): 623-625.

Volcanoes

Lava Flow Surface Textures: SIR-B Radar Image Texture, Field Observations, and Terrain Measurements. Lisa R. Gaddis, Peter J. Mougini-Mark, and Joan N. Hayashi, Feb (No. 2): 211-224.

W**Washington**

Artificial Neural Network Classification Using a Minimal Training Set: Comparison to Conventional Supervised Classification. George F. Hepner, Thomas Logan, Niles Ritter, and Nevin Bryant, Apr (No. 4): 469-473.

A Retrospective Analysis of GIS Performance: The Umatilla Basin Revisited. Joseph H. Astroth, Jr., Judy Trujillo, and Gary E. Johnson, Mar (No. 3): 359-363.

Water quality

Forum: Comparison of Landsat MSS Pixel Array Sizes for Estimating Water Quality. Michael H. Ames, Jan (No. 1): 92.

Water resources

Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Stephen J. Walsh, James W. Cooper, Ian E. Von Essen, and Kenneth R. Galager, Aug (No. 8): 1135-1141.

Selecting a GIS for a National Water Management Authority. Jan J. Olivier, Peter H. Greenwood, Antony K. Cooper, David R. McPherson, and Rudolf Engelbrecht, Nov (No. 11): 1471-1475.

Spectral Reflectance Relationships to Turbidity Generated by Different Clay Materials. D. S. Bhargava and Dejene W. Mariam, Feb (No. 2): 225-229.

Using Remote Sensing and GIS Technology to Help Adjudicate Idaho Water Rights. Anthony Morse, Thomas J. Zariello, and William J. Kramber, Mar (No. 3): 365-370.

Water resources. See also Drainage patterns; Drought; Irrigation

Wildfires. See Fires

Wildlife conservation

Framework for a Geographically Referenced Conservation Database: Case Study Nepal. Sean C. Ahearn, James L. David Smith, and Catherine Wee, Nov (No. 11): 1477-1481.

Wisconsin

Assessing Permit Compliance in Residential Areas Using Color 35*mm Aerial Photography. William R. Niedzwiedz, Feb (No. 2): 207-210.

Conversion of Automated Geographic Data to Decision Making Information. Stephen J. Ventura, Apr (No. 4): 511-516.

The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. W. Joseph Carper, Thomas M. Lillesand, and Ralph W. Kiefer, Apr (No. 4): 459-467.

Workstations

Quality Color Composite Image Display Using Low Cost Equipment. Salvador Diaz-Cayeros, Dec (No. 12): 1625-1629.

MAP PROJECTIONS MADE EASY

Map Projections Used by the U.S. Geological Survey: USGS Bulletin 1532, Second Edition and Map Projections - A Working Manual; USGS Professional Paper 1395 are useful to readers interested in the philosophy or history of projections or in mathematics. Both books have been written so that each projection may be individually consulted without reference to other projections.

Map Projections - A Working Manual a major revision of USGS Bulletin 1532. The general discussion of map projections has been greatly revised. The scope of the book has been expanded to include several other popular and useful projections, for a total of 26 projections in this volume.

Map Projections Used by the U.S. Geological Survey describes the characteristics of the projections and how they are used. This book begins with a general description of projections, followed by complete descriptions of 16 different map projects used by the USGS; nonmathematical phases described first, followed by formulas and tables.

** See the ASPRS Store in this issue for prices and ordering information **

1990 AUTHOR INDEX

A

Achard, Frédéric

Analysis of Vegetation Seasonal Evolution and Mapping of Forest Cover in West Africa with the Use of NOAA AVHRR HRPT Data. Oct (No. 10): 1359-1357.

Agnard, J. P.

See Gagnon, P. A. May (No. 5): 623-625.

Ahearn, Sean C.

Framework for a Geographically Referenced Conservation Database: Case Study Nepal. Nov (No. 11): 1477-1481.

American Society for Photogrammetry & Remote Sensing

ASPRS Accuracy Standards for Large Scale Maps. Jul (No. 7): 1068-1070.

Ames, Michael H.

Forum: Comparison of Landsat MSS Pixel Array Sizes for Estimating Water Quality. Jan (No. 1): 92.

Anderson, Carl

See Huberty, Brian. Aug (No. 8): 1169-1171.

Ansout, Marc M.

Mathematical Morphology: A Tool for Automated GIS Data Acquisition from Scanned Thematic Maps. Sep (No. 9): 1263-1271.

Arglilas, Demetre P.

Computation Image Interpretation Models: An Overview and a Perspective. Jun (No. 6): 871-886.

See Hadipriono, Fabian C. Jun (No. 6): 905-909.

Astroth, Joseph H.

A Retrospective Analysis of GIS Performance: The Umatilla Basin Revisited. Mar (No. 3): 359-363.

Avidor, J. M.

See Rosenberg, N. Sep (No. 9): 1273-1280.

B

Baker, L. Ralph

See Hutchinson, Charles F. Aug (No. 8): 1126-1128.

Barry, Bademba

See Gilruth, Peter T. Oct (No. 10): 1375-1382.

Baumann, Paul R.

Attempting to Detect and Record Brushland in the Northeastern United States Using MSS Data: Schoharie County, N.Y., as a Case Study. Mar (No. 3): 387-391.

Benjamin, Susan

Spatial Resolution Requirements for Automated Cartographic Road Extraction. Jan (No. 1): 93-100.

Bhargava, D. S.

Spectral Reflectance Relationships to Turbidity Generated by Different Clay Materials. Feb (No. 2): 225-229.

Bian, Ling

See Walsh, Stephen J. May (No. 5): 615-621.

Blachut T. J.

Book Review: *Fernerkundungs-Kartographie mit Satellitaufnahmen, Allgemeine Grundlagen und Anwendungen (Remote Sensing Cartography Based on Satellite Pictures, General Principles and Applications)* Volume IV/1 by H. G. Gierloff-Emden. Apr (No. 4): 467-468.

Blasco, François

See Achard, Frédéric. Oct (No. 10): 1359-1357.

Boge, Walter E.

ASPRS Report: Primary Data Acquisition Division. Jul (No. 7): 1052.

Boardman, J. W.

See Kruse, F. A. Jan (No. 1): 83-92.

Bormann, Gert E.

In Memoriam: Georg Strasser. Mar (No. 3): 357.

Borry, F. C.

Assessing the Value of Monotemporal SPOT-1 Imagery for Forestry Applications Under Flemish Conditions. Aug (No. 8): 1147-1153.

Boulianne, M.

See Gagnon, P. A. May (No. 5): 623-625.

Bounds, G. Clement

ASPRS Report: Report of the Teller Committee. Jul (No. 7): 1003.

Boyle, Timothy

See Ringrose, Susan. Sep (No. 9): 1253-1262.

Brostuen, David E.

See Ehlers, Manfred. Feb (No. 2): 175-180.

Brown, Daniel G.

See Walsh, Stephen J. May (No. 5): 615-621.

Bryant, Jack

AMOEBa Clustering Revisited. Jan (No. 1): 41-47.

Bryant, Nevin

See Hepner, George F. Apr (No. 4): 469-473.

Butler, David R.

See Walsh, Stephen J. May (No. 5): 615-621.

C

Campagna, David J.

See Pouch, Gregory W. Apr (No. 4): 475-479.

Campbell, James B.

Book Review: *Measurements from Maps: Principles and Methods of Cartometry* by D. H. Maling. Jan (No. 1): 73.

Campbell, N. A.

Forum: Accuracy Assessment: Another User's Perspective. Jan (No. 1): 60.

Campbell, William J.

Evolution of an Intelligent Information Fusion System. Jun (No. 6): 867-870.

Carper, W. Joseph

The Use of Intensity-Hue-Saturation Transformations for Merging SPOT Panchromatic and Multispectral Image Data. Apr (No. 4): 459-467.

Carrere, Veronique

Development of Multiple Source Data Processing for Structural Analysis at a Regional Scale. May (No. 5): 587-595.

Chamard, R. R.

ASPRS Report: Evaluation for Certification Committee. Jul (No. 7): 1058.

ASPRS Report: Professional Practice Division. Jul (No. 7): 1052.

Chou, Yue-Hong

Spatial Autocorrelation of Wildfire Distribution in the Idyllwild Quadrangle, San Jacinto Mountain, California. Nov (No. 11): 1507-1513.

Clapp, James

ASPRS Report: The Declaration of Dependence. Jul (No. 7): 1032.

Clark, Bill P.

Landsat Thematic Mapper Data Production: A History of Bulk Image Processing. Apr (No. 4): 447-451.

Cobos, Nancy

See Harrington, Leigh. Feb (No. 2): 181-185.

Colvocoresses, Alden P.

Landsat Update. Apr (No. 4): 434.

An Operational Earth Mapping and Monitoring Satellite System: A Proposal for Landsat 7. May (No. 5): 569-571.

Congalton, Russell G.

ASPRS Report: GIS Division. Jul (No. 7): 1050.

See Stenback, Janine M. Sep (No. 9): 1285-1290.

Cooper, Antony K.

See Olivier, Jan J. Nov (No. 11): 1471-1475.

Cooper, James W.

See Walsh, Stephen J. Aug (No. 8): 1135-1141.

Cress, Jill J.

Development and Implementation of a Knowledge-Based GIS Geological Engineering Map Production System. Nov (No. 11): 1529-1535.

Crompt, Robert F.

See Campbell, William J. Jun (No. 6): 867-870.

Curran, Paul J.

Forum: Miss-Precis. Mar (No. 3): 386.

D**Davis, Frank W.**

Information Analysis of a Spatial Database for Ecological Land Classification. May (No. 5): 605-613.

De Roover, B. P.

See Borry, F. C. Aug (No. 8): 1147-1153.

De Wulf, R. R.

See Borry, F. C. Aug (No. 8): 1147-1153.

Deister, Robin R. P.

See Cress, Jill J. Nov (No. 11): 1529-1535.

Deng, Gang

See Faig, Wolfgang. Feb (No. 2): 243-246.

Derenyi, Eugene

Extending a GIS to Support Image-Based Map Revision. Nov (No. 11): 1493-1496.

Dezzani, Raymond J.

See Chou, Yue-Hong. Nov (No. 11): 1507-1513.

Diaz-Cayeros, Salvador

Quality Color Composite Image Display Using Low Cost Equipment. Dec (No. 12): 1625-1629.

Dicks, Steven E.

Evaluation of Thematic Map Accuracy in a Land-Use and Land-Cover Mapping Program. Sep (No. 9): 1247-1252.

Diersing, Victor E.

See Warren, Steven D. Mar (No. 3): 333-335.

Dominique, Julla O.

See Pan, Jeng-Jong. May (No. 5): 573-578.

Dowman, I. J.

See Theodossiou, E. I. Dec (No. 12): 1643-1649.

Dozier, Jeff

See Davis, Frank W. May (No. 5): 605-613.

Dueholm, Keld S.

Multi-Model Stereo Restitution. Feb (No. 2): 239-242.

E**Eckhardt, David W.**

Automated Update of an Irrigated Lands GIS Using SPOT HRV Imagery. Nov (No. 11): 1515-1522.

Egenhofer, Max J.

LOBSTER: Combining AI and Database Techniques for GIS. Jun (No. 6): 919-926.

Ehlers, Manfred

Application of SPOT Data for Regional Growth Analysis and Local Planning. Feb (No. 2): 175-180.

Einav, S.

See Rosenberg, N. Sep (No. 9): 1273-1280.

Elad, D.

See Rosenberg, N. Sep (No. 9): 1273-1280.

Eliason, Eric M.

Adaptive Box Filters for Removal of Random Noise from Digital Images. Apr (No. 4): 453-458.

Engelbrecht, Rudolf

See Olivier, Jan J. Nov (No. 11): 1471-1475.

Escobar, D. E.

See Everitt, J. H. Mar (No. 3): 343-349.

Everitt, J. H.

Aerospace Video Imaging Systems for Rangeland Management. Mar (No. 3): 343-349.

Eyton, J. Ronald

SPOT PLA Photographic Image Processing. Aug (No. 8): 1129-1134.

F**Faig, Wolfgang**

The Enlarger-Digitizer Approach: Accuracy and Reliability. Feb (No. 2): 243-246.

Fierens, F.

See Van Cleynenbreugel, J. Jun (No. 6): 893-898.

Frank, Andrew U.

See Egenhofer, Max J. Jun (No. 6): 919-926.

French, William D.

ASPRS Report: Executive Director's Report. Jul (No. 7): 1041.

G**Gaddis, Lisa R.**

Lava Flow Surface Textures: SIR/B Radar Image Texture, Field Observations, and Terrain Measurements. Feb (No. 2): 211-224.

Gagnon, P. A.

A Microcomputer-Based General Photogrammetric System. May (No. 5): 623-625.

Gallager, Kenneth R.

See Walsh, Stephen J. Aug (No. 8): 1135-1141.

Gaydos, Leonard

See Benjamin, Susan. Jan (No. 1): 93-100.

Gesch, Dean B.

See Imhoff, Marc Lee. Aug (No. 8): 1155-1162.

Gilruth, Peter T.

Assessing Deforestation in the Guinea Highlands of West Africa Using Remote Sensing. Oct (No. 10): 1375-1382.

Gong, Peng

An Assessment of Some Factors Influencing Multispectral Land-Cover Classification. May (No. 5): 597-603. The Use of Structural Information for Improving Land-Cover Classification Accuracies at the Rural-Urban Fringe. Jan (No. 1): 67-73.

Goossens, R. E.

See Borry, F. C. Aug (No. 8): 1147-1153.

Goran, William D.

See Warren, Steven D. Mar (No. 3): 333-335.

Goward, Samuel N.

Book Review: *Radar Remote Sensing, A Training Manual* by Dirk Werle. May (No. 5): 571-572.

Greenwood, Peter H.

See Olivier, Jan J. Nov (No. 11): 1471-1475.

Greer, Jerry D.

Feature Article: Photographing Everest. Jan (No. 1): 110-116.

H**Hadipriono, Fabian C.**

The Development of a Knowledge-Based Expert System for Analysis of Drainage Patterns. Jun (No. 6): 905-909.

Hall, R. J.

A Microcomputer-Based Camera Control System. Apr (No. 4): 443-446.

Harlow, Charles A.

See Argialas, Demetre P. Jun (No. 6): 871-886.

Harrington, Leigh

Sample Surveys that Use Imagery with Varying Area Coverage. Feb (No. 2): 181-185.

Harris, Jeff R.

IHS Transform for the Integration of Radar Imagery with other Remotely Sensed Data. Dec (No. 12): 1631-1641.

Hartshorn, Gary S.

See Luvall, Jeffrey C. Oct (No. 10): 1393-1401.

Hayashi, Joan N.

See Gaddis, Lisa R. Feb (No. 2): 211-224.

He, D.

See Wang, Li. Jan (No. 1): 61-66.

Helfert, Michael R.

Mapping Continental-Scale Biomass Burning and Smoke Falls over the Amazon Basin as Observed from the Space Shuttle. Oct (No. 10): 1367-1373.

Hemenway, Don

PE&RS Interview: John Antenucci. Nov (No. 11): 1537-1547.

Hepner, George F.

Artificial Neural Network Classification Using a Minimal Training Set: Comparison to Conventional Supervised Classification. Apr (No. 4): 469-473.

Hirose, Tom

See Harris, Jeff R. Dec (No. 12): 1631-1641.

Hiscocks, P.

See Hall, R. J. Apr (No. 4): 443-446.

Hoffer, Roger M.

President's Address. Jul (No. 7): 1038-1040.

Howard, R. Richard

See Ehlers, Manfred. Feb (No. 2): 175-180.

Howarth, Philip J.

See Gong, Peng. Jan (No. 1): 67-73.

See Gong, Peng. May (No. 5): 597-603.

Huang, Scott L.

Applications of Digital Image Processing to Photoelastic Stress Analysis. Apr (No. 4): 495-499.

Huberty, Brian

Coal Pile Inventory Using 35-mm Oblique Terrestrial Photogrammetry. Aug (No. 8): 1169-1171.

Hummer-Miller, Susanne

Techniques for Noise Removal and Registration of TIMS DATA. Jan (No. 1): 49-53.

Hutchinson, Charles F.

A Two-Channel Multiplex Video Remote Sensing System. Aug (No. 8): 1125-1128

See Gilruth, Peter T. Oct (No. 10): 1375-1382.

See Marsh, Stuart E. Mar (No. 3): 359-363.

I**Imhoff, Marc Lee**

The Derivation of a Sub-Canopy Digital Terrain Model of a Flooded Forest Using Synthetic Aperture Radar. Aug (No. 8): 1155-1162.

Isaacson, Dennis L.

Comparison of 7.5 Minute and 1-Degree Digital Elevation Models. Nov (No. 11): 1523-1527.

J**Jaakkola, Sipi**

Managing Data for the Monitoring of Tropical Forest Cover: The Global Resource Information Database Approach. Oct (No. 10): 1355-1365.

Jaarsma, Marijke N.

See Janssen, Lucas L. F. Nov (No. 11): 1503-1506.

Jadkowski, Mark A.

See Ehlers, Manfred. Feb (No. 2): 175-180.

Jakubauskas, Mark E.

Assessment of Vegetation Change in a Fire-Altered Landscape. Mar (No. 3): 371-377.

Janssen, Lucas L. F.

Integrating Topographic Data with Remote Sensing for Land-Cover Classification. Nov (No. 11): 1503-1506.

Jensen, John

See Nellis, M. Duane. Mar (No. 3): 329-331.

Johannsen, Chris J.

ASPRS Report: Awards Committee. Jul (No. 7): 1055-1056.

Johnson, Gary E.

See Astroth, Joseph H. Mar (No. 3): 359-363.

Johnson, Mark O.

See Warren, Steven D. Mar (No. 3): 333-335.

Jordan, T. R.

See Welch, R. Oct (No. 10): 1389-1392.

Joyce, Armond T.

See Sader, Steven A. Oct (No. 10): 1343-1351.

K**Kiefer, Ralph W.**

See Carper, W. Joseph. Apr (No. 4): 459-467.

Kierein-Young, K. S.

See Kruse, F. A. Jan (No. 1): 83-92.

Kramber, William J.

See Mausel, P. W. Jan (No. 1): 55-60.

See Morse, Anthony. Mar (No. 3): 365-370.

Kretsch, Jeffrey L.

Decision Considerations Arising from Error Propagation through Belief Calculations. Jun (No. 6): 927-931.

Krogulecki, Matthew

A Prototype Decision Guide and Audit Log for Preparation of Spatial Databases. Apr (No. 4): 505-509.

Kruse, F. A.

Mineral Mapping at Cuprite, Nevada with a 63-Channel Imaging Spectrometer. Jan (No. 1): 83-92.

L**Lam, Nina Slu-Ngan**

Description and Measurement of Landsat TM Images Using Fractals. Feb (No. 2): 187-195.

Leckie, D. G.

Synergism of Synthetic Aperture Radar and Visible/Infrared Data for Forest Type Discrimination. Sep (No. 9): 1237-1246.

LeDrew, Ellsworth F.

See Piwowar, Joseph M. Nov (No. 11): 1497-1502.

Lee, J.

See Mausel, P. W. Jan (No. 1): 55-60.

Lee, Royal

Robot Location Using Single Views of Rectangular Shapes. Feb (No. 2): 231-238.

Li W. H., Thomas

See Hadipriono, Fabian C. Jun (No. 6): 905-909.

Lieberman, Diana

See Luvall, Jeffrey C. Oct (No. 10): 1393-1401.

Lieberman, Milton

See Luvall, Jeffrey C. Oct (No. 10): 1393-1401.

Light, Donald L.

Characteristics of Remote Sensors for Mapping and Earth Science Applications. Dec (No. 12): 1613-1623.

Lillesand, Thomas M.

See Carper, W. Joseph. Apr (No. 4): 459-467.

Lo, C. P.

Detailed Urban Land-Use and Land-Cover Mapping Using Large Format Camera Photographs: An Evaluation. Feb (No. 2): 197-206.

A GIS Approach to Land-Use Change Dynamics Detection. Nov (No. 11): 1483-1491.

Lo, Thomas H. C.

See Dicks, Steven E. Sep (No. 9): 1247-1252.

Logan, Thomas

See Hepner, George F. Apr (No. 4): 469-473.

Loodts, Jean A.

See Ansoult, Marc M. Sep (No.9): 1263-1271.

Lowell, Kim E.

Difference between Ecological Land Type Maps Produced Using GIS or Manual Cartographic Method. Feb (No. 2): 169-173.

Lu, Po-Chiang

See Lee, Royal. Feb (No. 2): 231-238.

Lulla, Kamlesh P.

See Everitt, J. H. Mar (No. 3): 343-349.

See Helfert, Michael R. Oct (No. 10): 1367-1373.

See Jakubauskas, Mark E. Mar (No. 3): 371-377.

See Nellis, M. Duane. Mar (No. 3): 329-331.

Luvall, Jeffrey C.

Estimation of Tropical Forest Canopy Temperatures, Thermal Response Numbers, and Evapotranspiration Using an Aircraft-Based Thermal Sensor. Oct (No. 10): 1393-1401.

See Welch, R. Oct (No. 10): 1389-1392.

Lyford, Gordon R.

See Eckhardt, David W. Nov (No. 11): 1515-1522.

Lyon, John G.

See Hadipriono, Fabian C. Jun (No. 6): 905-909.

M**Mariam, Dejne W.**

See Bhargava, D. S. Feb (No. 2): 225-229.

Marsh, Stuart E.

Development of an Agricultural Land-Use GIS for Senegal Derived from Multispectral Video and Photographic Data. Mar (No. 3): 359-363.

Matheson, Wilma

See Ringrose, Susan. Sep (No.9): 1253-1262.

Mausel, Paul W.

Optimum Band Selection for Supervised Classification of Multispectral Data. Jan (No. 1): 55-60.

See Jakubauskas, Mark E. Mar (No. 3): 371-377.

McEwen, Alfred S.

See Eliason, Eric M. Apr (No. 4): 453-458.

McKeown, David M.

See Perlant, Frederick P. Apr (No. 4): 481-493.

McPherson, David R.

See Olivier, Jan J. Nov (No. 11): 1471-1475.

Mehldau, Gerhard

A C-Extension for Rule-Based Image Classification Systems. Jun (No. 6): 887-892.

Merchant, Dean C.

Book Review: *High Precision Navigation—Integration of Navigational and Geodetic Methods* edited by K. Linkwitz and U. Hangleiter. Jun (No. 6): 910.

Mikhail, Edward M.

Memorial Address: Arthur J. McNair. Jul (No. 7): 1027-1031.

See Kretsch, Jeffrey L. Jun (No. 6): 927-931.

Minnich, Richard A.

See Chou, Yue-Hong. Nov (No. 11): 1507-1513.

Moller-Jensen, Lasse

Knowledge-Based Classification of an Urban Area Using Texture and Context Information in Landsat-TM Imagery. Jun (No. 6): 899-904.

Moran, M. Susan

A Window-Based Technique for Combining Landsat Thematic Mapper Thermal Data with Higher-Resolution Multispectral Data over Agricultural Lands. Mar (No. 3): 337-342.

Morse, Anthony

Using Remote Sensing and GIS Technology to Help Adjudicate Idaho Water Rights. Mar (No. 3): 365-370.

Mouglins-Mark, Peter J.

See Gaddis, Lisa R. Feb (No. 2): 211-224.

Murray, Richard

See Harris, Jeff R. Dec (No. 12): 1631-1641.

N**Nellis, M. Duane**

Interfacing Geographic Information Systems and Remote Sensing for Rural Land-Use Analysis. Mar (No. 3): 329-331.

Niedzwiedz, William R.

Assessing Permit Compliance in Residential Areas Using Color 35-mm Aerial Photography. Feb (No. 2): 207-210.

Noble, W. Edward, Jr.

See Lo, C. P. Feb (No. 2): 197-206.

Nolette, C.

See Gagnon, P. A. May (No. 5): 623-625.

O**Olivier, Jan J.**

Selecting a GIS for a National Water Management Authority. Nov (No. 11): 1471-1475.

Ondrejka, Ron

ASPRS Report: Long Range Planning Committee. Jul (No. 7): 1054.

Oosterlinck, A.

See Van Cleynenbreugel, J. Jun (No. 6): 893-898.

P**Pan, Jeng-Jong**

Differentiator Design and Performance for Edge Sharpening. May (No. 5): 573-578.

Parks, Nancy L.

ASPRS Report: Joint Government Affairs Program (JGAC) [Government Affairs Committee]. Jul (No. 7): 1057-1058.

Peralta, Rodolfo

See Luvall, Jeffrey C. Oct (No. 10): 1393-1401.

Perlant, Frederic P.

Scene Registration in Aerial Image Analysis. Apr (No. 4): 481-493.

Pettinger, Lawrence R.

ASPRS Report: Inter-Society Liaison Committee. Jul (No. 7): 1056.

Pierce, Lars L.

Remote Detection of Canopy Water Stress in Coniferous Forests Using the NS001 Thematic Mapper Simulator and Thermal Infrared Multispectral Scanner. May (No. 5): 579-586.

Piwowar, Joseph M.

Integrating Spatial Data: A User's Perspective. Nov (No. 11): 1497-1502.

Pollock, Richard

See Derenyi, Eugene. Nov (No. 11): 1493-1496.

Pouch, Gregory W.

Hyperspherical Direction Cosine Transformation for Separation of Spectral and Illumination Information in Digital Scanner Data. Apr (No. 4): 475-479.

Power, Jeanne D.

See Chou, Yue-Hong. Nov (No. 11): 1507-1513.

Preston, Robert A.

See Vanclay, Jerome K. Oct (No. 10): 1383-1388.

R**Reimnitz, Arlen G.**

ASPRS Report: Your Board in Action. Jul (No. 7): 1066-1067.

Richardson, A. J.

See Everitt, J. H. Mar (No. 3): 343-349.

Riggs, George A.

See Pierce, Lars L. May (No. 5): 579-586.

Ringrose, Susan

The Development and Causes of Range Degradation Features in South-east Botswana Using Multi-Temporal Landsat MSS Imagery. Sep (No.9): 1253-1262.

Ripple, William J.

See Isaacson, Dennis L. Nov (No. 11): 1523-1527.

Ritter, Niles

See Hepner, George F. Apr (No. 4): 469-473.

Rivard, Mark

See Harrington, Leigh. Feb (No. 2): 181-185.

Rosenberg, N.

Simplified Remote Measurement of Three-Dimensional Surfaces: Application for Biomedical Engineering. Sep (No.9): 1273-1280.

Running, Steven W.

See Pierce, Lars L. May (No. 5): 579-586.

Ryan, Anne

ASPRS Report: Membership Committee. Jul (No. 7): 1057.

ASPRS Report: Region Presidents and Officers Meeting, Annual Report. Jul (No. 7): 1063-1065.

S**Sader, Steven A.**

Remote Sensing of Tropical Forests: An Overview of Research and Applications Using Non-Photographic Sensors. Oct (No. 10): 1343-1351.

Sahar, M.

See Rosenberg, N. Sep (No.9): 1273-1280.

Salazar, Lucy A.

See Chou, Yue-Hong. Nov (No. 11): 1507-1513.

Salsig, Gerry

Counting the Errors: Presentation of Aerotriangulation Residuals for Easy Evaluation. May (No. 5): 627-629.

Schafer, Thomas M.

In Memoriam: Talbert Abrams. Nov (No. 11): 1453.

Schenk, Tony

Experiments with a Rule-Based System for Interpreting Linear Map Features. Jun (No. 6): 911-917.

Schowengerdt, Robert A.

See Hutchinson, Charles F. Aug (No. 8): 1126-1128.

See Mehldau, Gerhard. Jun (No. 6): 887-892.

Schwartz, P. G.

See van den Brink, G. Apr (No. 4): 501-504.

Schweiger, A. J.

See Steffan, K. Jan. (No. 1): 75-82.

Shih, Tian-Yuan

The Duality and Critical Condition in the Formulation and Decomposition of a Rotation Matrix. Aug (No. 8): 1173-1179.

On the Duality of Relative Orientation. Sep (No.9): 1281-1283.

See Faig, Wolfgang. Feb (No. 2): 243-246.

Shipman, Robert L.

See Lo, C. P. Nov (No. 11): 1483-1491.

Singh, K. D.

Design of a Global Tropical Forest Resources Assessment. Oct (No. 10): 1353-1354.

Smith, James L.

Book Review: *The Association for Geographic Information Yearbook 1989* edited by Peter Shand and Roger Moore. Nov (No. 11): 1514.

Smith, James L. David

See Ahearn, Sean C. Nov (No. 11): 1477-1481.

Solille, Pierre J.

See Ansoult, Marc M. Sep (No.9): 1263-1271.

Steffan, K.

A Multisensor Approach to Sea Ice Classification for the Validation of DMSP-SSM/I Passive Microwave Derived Sea Ice Products. Jan. (No. 1): 75-82.

Stenback, Janine M.

Using Thematic Mapper Imagery to Examine Forest Understory. Sep (No.9): 1285-1290.

Stone, Thomas A.

See Sader, Steven A. Oct (No. 10): 1343-1351.

Suetens, P.

See Van Cleynebreugel, J. Jun (No. 6): 893-898.

T**Taai, Wen-Hsiang**

See Lee, Royal. Feb (No. 2): 231-238.

Tempest, Faith

See Ringrose, Susan. Sep (No.9): 1253-1262.

Teng, William L.

AVHRR Monitoring of U. S. Crops During the 1988 Drought. Aug (No. 8): 1143-1146.

Thapa, Khagendra

Data Compression in Digitized Lines. Apr (No. 4): 517-518.

Theodossiou, E. I.

Heighting Accuracy of SPOT. Dec (No. 12): 1643-1649.

Thompson, Robert W.

ASPRS Report: Bylaws Committee. Jul (No. 7): 1052-1053.

Townsend, Henry M.

Memorial Address: Roland H. Moore. Jul (No. 7): 1033-1037.

Treadwell, Joann H.

ASPRS Report: Annual Convention Report 1990. Jul (No. 7): 1000-1002.

Trujillo, Judy

See Astroth, Joseph H. Mar (No. 3): 359-363.

Tubis, Harry

In Memoriam: John Oran Eichler. Mar (No. 3): 370.

Turner, Monica G.

Landscape Changes in Nine Rural Counties in Georgia. Mar (No. 3): 379-386.

V**Van Cleynebreugel, J.**

Delineating Road Structures on Satellite Imagery by a GIS-Guided Technique. Jun (No. 6): 893-898.

van den Brink, G.

A new Testing Procedure for Recruitment of Photogrammetrists. Apr (No. 4): 501-504.

van der Linden, Eric T. M.

See Janssen, Lucas L. F. Nov (No. 11): 1503-1506.

van der Wildt, G.

See van den Brink, G. Apr (No. 4): 501-504.

Vanclay, Jerome K.

Utility of Landsat Thematic Mapper Data for Mapping Site Productivity in Tropical Moist Forests. Oct (No. 10): 1383-1388.

Ventura, Stephen J.

Conversion of Automated Geographic Data to Decision-Making Information. Apr (No. 4): 511-516.

Report: Federal Land and Geographic Information System Activities. May (No. 5): 631-634.

Verdin, James P.

See Eckhardt, David W. Nov (No. 11): 1515-1522.

Von Essen, Ian E.

See Walsh, Stephen J. Aug (No. 8): 1135-1141.

Voss, Alan W.

ASPRS Report: Photogrammetric Applications Division. Jul (No. 7): 1051.

W**Walsh, James L.**

See Marsh, Stuart E. Mar (No. 3): 359-363.

Walsh, Stephen J.

Cartographic Modeling of Snow Avalanche Path Location within Glacier National Park, Montana. May (No. 5): 615-621.

Image Enhancement of Landsat Thematic Mapper Data and GIS Data Integration for Evaluation of Resource Characteristics. Aug (No. 8): 1135-1141.

Wang, Fangju

Improving Remote Sensing Image Analysis through Fuzzy Information Representation. Aug (No. 8): 1163-1169.

Wang, Li

A New Statistical Approach for Texture Analysis. Jan (No. 1): 61-66.

Warren, Steven D.

An Automated, Objective Procedure for Selecting Representative Field Sample Sites. Mar (No. 3): 333-335.

Watkins, John F.

Book Review: *Area Sampling from Satellite Image for Socio-demographic Surveys in Urban Environments: Training Handbook* by F. Dureau, O. Barbary, A. Michel, and B. Lortic. Nov (No. 11): 1513.

Weber, Frederick P.

In Memoriam: Robert C. Heller. Sep (No. 9): 1292.

Wee, Catherine

See Ahearn, Sean C. Nov (No. 11): 1477-1481.

Welch, R.

Geocoding and Stereo Display of Tropical Forest Multisensor Datasets. Oct (No. 10): 1389-1392.

Westin, Korbjorn

Precision Rectification of SPOT Imagery. Feb (No. 2): 247-253.

Wooters, David

Book Review: *Pioneers of Photography, Their Achievements in Science and Technology* edited by Eugene Ostroff. Jun (No. 6): 909-910.

Z**Zarriello, Thomas J.**

See Morse, Anthony. Mar (No. 3): 365-370.

Zeltser, R.

See Rosenberg, N. Sep (No.9): 1273-1280.

Zilberstein, Ofer

See Schenk, Tony. Jun (No. 6): 911-917.

Zink, William

See Harrington, Leigh. Feb (No. 2): 181-185.

IMAGE PROCESSING '89 AND 12TH COLOR WORKSHOP

Due to the rapid development of airborne video systems, the Image Processing '89 meeting was held in conjunction with the 12th Biennial Workshop on Color Aerial Photography and Videography in the Plant Sciences and Related Fields. The meetings were held in Sparks, Nevada in May of 1989.

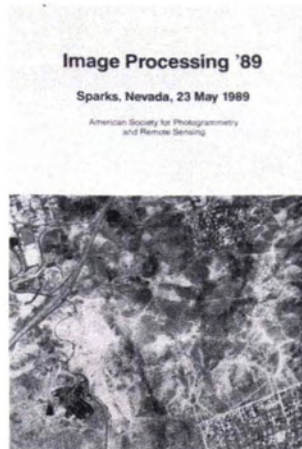
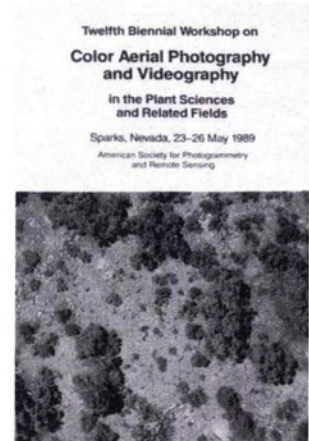


Image Processing '89 contains 30 papers covering • spectral and spatial unmixing • measurement of atmospheric water vapor • a variogram study of SIR-B data • tropical deforestation • statistical approaches to textural analysis. The five sections cover Image Spectroscopy, Geology, Forestry, Image Processing Techniques, and Land and Water Resources.

The 12th Biennial Color Aerial Photography and Videography Workshop in the Plant Sciences and Related Fields consists of 29 papers. This publication contains the latest information on using color and color infrared photography and video for vegetation assessment. Applications include airborne video for mapping and GIS • estimating crop yields • quantification of nutrient stress • monitoring of contamination by hazardous materials •

insect infestation monitoring • forest stand analysis • use of remotely piloted aircraft.



___ **Image Processing '89** #4519, Reg. price \$45, \$25 ASPRS Members
 ___ **12th Color Workshop** #4718, Reg. price \$55, \$30 ASPRS Members

Method of Payment: ___ Payment Enclosed ___ Mastercard ___ VISA
 Account Number (all digits) _____ Exp. date ___ Signature _____

Send books to: _____

ASPRS, P.O. Box 1269, Evans City, PA 16033; phone 412-772-0070; fax 412-772-5281.

All checks must be in US dollars payable to ASPRS. COD orders not accepted. Prices are subject to change without notice.