

INDEX TO PHOTOGRAHMETRIC ENGINEERING

VOLUME XXXIX, 1973*

A

- Abdel-Aziz, Youssef I.*, lens distortion, 611
Abrams Award, E. E. Derenyi, 745
ABSTRACTS OF 1973 CONVENTION PAPERS, 290
A CASE FOR ORTHOPHOTO MAPPING, *Veign & Reeves*, 1059
ACCURACY/COSTS WITH ANALYTICS, *Lafferty*, 507
Ackermann, Dr. Friedrich, independent models, 967
ADDRESS OF INCOMING PRESIDENT, Wright, 770
Aerotriangulation
Ackermann, et al., independent models, 967
Anderson & Ramey, ISP test block, 1087
Arthur, interpolation, 261
Ball, tensor approach, 81
Elphinstone, partitioning, 267
Lafferty, costs, 507
Maarek, independent models,
Maarek & Konecny, normal distribution, 959
Mikhail, least squares, 405
Mikhail & Helminger, recursive partitioning, 983
Nasu, independent models, 1215
Schut, similarity transformation, 621
Veress, stereosimplex IIc, 1215
Wong, partitioning, 267
AERIAL CAMERA MOUNT FOR 70-MM STEREO, *Sabins*, 579
Aerial camera capability, *Ghosh*,
AIL Award, ERTS Team, 748
Altenhofen, Robert E.
 Birdseye Citation, 760
 Report of the President, 765
American Society of Photogrammetry, aims, 679
A new concept in orthophotography, *Danko*, 1161
Analysis of RBV television system, *Wong*, et al., 851
ANALYTIC BLOCK ADJUSTMENT, *Anderson & Ramey*, 1087
Analytics, costs, *Lafferty*, 507
Anderle, R. L., doppler, 515
Anderson, Delmar E., population estimates, 147
Anderson, Dr. James M., ISP block test, 1087
Anderson, Philip N., population estimates, 147
Anderson, Dr. Richard R., wetlands, 353
Anderson, Dr. Robert R., coastal management, 593
Apollo 15 panoramic photographs, *McCash*, 65
Arthur, D. W. G., function interpolation, 261
Atmospheric effects in multispectral photos, *Ross*, 377
Atmospheric refraction, *Scarpaci & Wolf*, 521
Automatic contouring, *Jancaitis & Junkins*, 413
Automatic image analysis, *Jensen*, 1321
Autometric Award, *Messrs. Piech and Walker*, 751
Awards and citations of ASP, 741
Awards of I.S.P.
 Brock Gold Medal, 762
 Otto von Gruber Award, 764

B

- Ball, William E.*, block triangulation, 81
Bartlett, Ford, awards, 757
Bausch & Lomb award
 Hans J. Bernath, 755
 George A. Wallace, 756
BEETLE-KILLED PINE ESTIMATES, *Klein*, 385
Benesch, Milosh, Mars photos, 1171
Bernath, Hans J.
 Bausch & Lomb award, 755
 multispectral calibration, 939
Bernstein, Ralph, digital correction, ERTS, 1311
Berrey, J. L., petroleum spills, 1277
BIAS FROM PHOTO INTENSITY, *Payandeh*, et al., 473
Birdseye President's Citation, *Altenhofen*, 760
Blachut, Teodor J.,
 photogrammetric award, 743
 Luis Struck award, 753
BLOCK ADJUSTMENT WITH INDEPENDENT MODELS, *Ackermann*, et al., 967
Block triangulation, tensors, *Ball*, 81
Brandenberger, Arthur J., ship collisions, 35
Brief history of the Defense Mapping Agency, *Penney*, 469
Bright spot, *Hulstrom*, 370
Butters, Kieth A., sensor test area, 1197

C

- Cadastral maps**, *Veign & Reeves*, 1059
Calibration, *Bernath*, multispectral, 939
Camera
 Fisher & Steever, 35-mm quadricamera, 573
Ghosh, accuracy, 1179
Klein, 35-mm, 385
Lo & Wong, 35-mm close-range, 1289
Sabins, 70-mm mount, 579
Carnes, Robert W., color-image recorder, 395
Cartography, EROS photos, *Colvocoresses*, 1303
CASE FOR ORTHOPHOTO MAPPING, *Veign & Reeves*, 1059

Census

- Anderson*, estimates, 147
McCoy, house density, 43
Cinema photos, *Brandenberger*, 35
Clark, Dennis K., estuarine circulation, 927
Close-range photos
 Abdel-Aziz, lens distortion, 611
 Faig, convergent photos, 605
 Lo & Wong, geomorphology, 1289
CLOUD BRIGHT SPOT, *Hulstrom*, 370
Coastal management, *Wobber*, 593
Coastal processes, *Dolan & Vincent*, 255
COLOR AERIAL PHOTOS FOR MARSHLAND, *Seher & Tueller*, 489
Color-infrared photos
Anderson, wetlands, 353
Sabins, flight planning, navigation, 49
Turinetti, computer analysis, 501
Whipple, water quality, 137
Color photographs
Dolan, coastal processes, 255
Keene & Pearcy, oceanography, 163
Mairs, estuarine circulation, 927
Seher, et al., marshland, 489
Specht, et al., water penetration, 359
Reimold, et al., tidal marsh, 477
Reinheimer, oil spills, 1277
Coluccio, Thomas L., holography, 617
Colvocoresses, Alden P., EROS cartography, 1303
Committees of ASP, 680
COMPILATION OF LUNAR PAN PHOTOS, *Peterson*, 73
COMPUTER ANALYSIS OF IMAGERY, *Turinetti & Mintzer*, 501
Continuous-strip imagery, *Derenyi*, 1329
Contouring
 Jancaitis & Junkins, automatic, 413
 Miller, space, 599
Control, doppler, *Anderle*, 515
CONVERGENT PHOTOS FOR CLOSE RANGE, *Faig & Moniwa*, 605

D

- Danko, Loseph O., Jr.*, orthophotography, 1161
Davies, Merton E., Mariner 9, 1297
Demography
Anderson, estimates 147
McCoy, house density, 43
Derenyi, Dr. Eugene E.
 Abrams award, 745
 strip imagery, 1329
DETECTION OF PETROLEUM SPILLS, *Reinheimer*, et al., 1277
Diapositive in education, *Loy*, 41
DiCaprio, G. Robert, holography, 617
DIFFRACTION PATTERN ANALYSIS, *Jensen*, 1321
DIGITAL CORRECTION FOR HIGH-RESOLUTION IMAGES, *Markarian*, et al., 1311
Distortion and rectification if IR, *Masry & Gibbons*, 845
Dolan, Prof. Robert, coastal processes, 255
Doppler, *Anderle*, 515
Dorner, Dr. Egon, plotter, calculator, 1065
Doyle, Frederick J., the future, 243
Dutton, David, lens testing, 275

E

- Earth resources studies**, *Slater*, 197
EARTHQUAKE-RISK MAPPING, *Kedar*, et al., 831
Ebner, Dr. Heinrich, independent models, 967
Economics, *Lafferty*, 507
ELECTRONIC VIEWER FOR MULTIBAND IMAGERY, *Roberts*, 155
Elphinstone, Gerald M., recursive partitioning, 267
Emeritus Members, 761
EROS CARTOGRAPHIC PROGRESS, *Colvocoresses & McEwen*, 1303
ERS recorder, *Montouri*, et al., 395
ERTS, simulated data, *Wobber*, 593
Estes, John E., oil spills, 1035

F

- Faig, Wolfgang*, convergent photos, 605
Fairchild Award, *T. J. Blachut*, 743
Feedlot runoff, *Wallace*, 949
Ferneighough, Dallam G., digital corrections, 1311
Fisher, John J., 35-mm quadricamera, 573
Fleming, Mrs. E. A., orthophoto quality, 1151
FLIGHT PLANNING . . . FOR THERMAL-IR SURVEYS, *Sabins*, 49
Forestry
 Heath, hot spots, 1205
 Payandeh, photo intensity, 473
Fritz, N. L., water penetration, 359
FUTURE OF PHOTOGRAHMETRY, *Doyle*, 243

* An index is included in the last issue of each volume. Cumulative indexes were prepared for 1934-1948 and 1949-1958.

- G**
- Gallagher, John L., tidal marsh, 477
 Gamble, Eugene V., Jr., television system, 851
 Gardner, Dr. Irvin C., obituary, 207
GEODETIC CONTROL WITH DOPPLER, Anderle, 515
 Ghosh, Dr. Sanjib K.
 image quality, 1179
 reading for research, 401
 Gibbons, James G., IR distortion, 845
 Gregg, Leon E., digital correction, 1311
- H**
- Harden, Milton J., obituary, 635
 Hasselblad camera, Kammerer, 59
 Headquarters staff, 778
 Heath, Gordon R., hot spot on photos, 1205
 Helmring, Dr. R. S., recursive methods, 983
 High-altitude photos, Dolan, 255
HIGH-PHOTOS OF THE OREGON COAST, Keene & Pearcey, 163
HIGH-SPEED IMAGE ANALYSIS TECHNIQUES, Jensen, 1321
 Holmes, Robert M., obituary, 1100
HOLOGRAPHY, RADAR DATA AND INTERPRETATION PERFORMANCE, Wasilewski, et al., 617
 Holograms, McDonnell, 251
 Holt, Robert K., remote sensing, 177
 Honorary membership, L. W. Swanson, 741
 Hooker, R. Brian, microscopes, 283
 Hopkins, Robert E., lens testing, 275
HOT SPOT DETERMINATION, Heath, 1205
 Hotine, Martin, memorial lecture by Whitten, 821
HOUSE DENSITY VS. SOCIOECONOMIC CONDITIONS, McCoy & Metivier, 43
 Hsu, Dr. Shin-yi, earthquake risk, 831
 Hulstrom, R. L., bright spot, 370
- I**
- IMAGE QUALITY VS. METRIC CAPABILITY**, Ghosh, 1179
 Independent models
 Maarek, new math, 1077
 Klein, block adjustment, 967
 Information system, Wellar, 1041
 Infrared
 Anderson, wetlands, 353
 Masry & Gibbons, distortion, 845
 Sabins
 flight planning, navigation, 49
 processing, 839
 Turinetti, computer analysis, 501
 Whipple, water quality, 137
 International Society of Ph., 683, 684, 762, 764
INTERPOLATION OF A FUNCTION OF MANY VARIABLES, II. Arthur, 261
 Iter moon camera, McCash, 65
- J**
- Jacobs, Lawrence P., report of executive director, 768
 Jancaitis, J. R., automatic contouring, 413
 Jensen, Niels, image analysis, 1321
 Jenkins, Prof. J. L., automatic contouring, 413
- K**
- Kammerer, Joachim, moon camera, 59
 Kedar, Dr. Ervin Y., earthquake risk, 831
 Keene, Donald F., high-altitude, 163
 Kelsh K-320 Orthoscan, Danko, 1161
 King, Jasper H., obituary, 1100
 Klein, Hermann, independent models, 969
 Klein, William H., beetles, pine, 385
 Konecny, Dr. Gottfried, modulated normal distribution, 959
 Kulow, Donald L., obituary, 426
 Kurz, B., plotter, calculator, 1065
- L**
- Lafferty, Maurice E., economics, 507
 Landform analysis, Lewis & Waite, 189
 LaPrade, George L., stereoscopy, 1271
 Leachauer, J. C., photointerpretation test, 1187
LENS DISTORTION AND CLOSE RANGE, Abdel-Aziz, 611
LENS TESTING OR IMAGE EVALUATION, Hopkins & Dutton, 275
LEAST SQUARES AND NON-LINEAR FUNCTIONS, Stark & Mikhail, 405
 Least squares, Schut, 621
 Letourneau, Philip J., obituary, 530
 Lewis, Anthony J., radar shadows, 189
 Lo, C. P., close-range geomorphology, 1289
 Loy, William G., diapositives in education, 41
 Lunar photos, Schmitt, 815
- M**
- Maarek, Dr. Ahmed M.
 independent models, 1077
 modulated normal distribution, 959
 Maenner, Edward H., obituary, 1100
 Mairs, Robert L., estuarine circulation, 927
MARINE OIL ACCUMULATIONS, Estes, et al., 1035
- MARINER MARS 9 STEREOPHOTOGRAMMETRY**, Benesh, 1171
MARINER 9: PRIMARY CONTROL NET, Davies, 1297
 Markarian, Dr. Hagop, digital correction, ERTS, 1311
 Mars control net, Davies, 1297
 Mars mapping, Stephens, 389
 Marsh
 Reimold, et al., remote sensing, 477
 Seher, et al., color photos, 489
 Wobber, coastal management, 593
 Martin Hotine, friend and pro, Whitten, 821
 Masry, Dr. Salem E., IR distortion, 845
 McCash, Donald K., Apollo 15 pan photos, 65
 McCoy, Roger M., house density, 43
 McDonnell, Michael, holograms, 251
 McEwan, Robert B., EROS cartography, 1303
MEASURE OF THE MOON, Schmitt, 815
 Member Emeritus, 761
 Memorial lecture on Martin Hotine, Whitten, 821
 Merchant, Dr. Dean C., Region-of-the-Year award, 757
 Metivier, Ernest D., house density, 43
 Metric capability, Ghosh, 1183
 Micro-scale geomorphology features, Lo & Wong, 1289
 Microwave, Moore & Waite, 1051
 Mikhail, Dr. Edward M.
 least squares, 405
 recursive methods, 983
 Miller, Prof. Charles L., stereoscopy, 599
 Mintzer, Prof. Olin W., automation, P.I., 501
 Modeling irregular surfaces, Jancaitis & Jenkins, 413
MODULATED NORMAL DISTRIBUTION, Maarek & Konecny, 959
 Moniwa, Hideya, convergent photos, 605
 Montouri, John S., color-image recorder, 395
MOON CAMERA AND ITS LENSES, Kammerer, 59
 Moon, Schmitt, 815
 Moore, Dr. Richard K., microwave, 1051
 Movie photos, Brandenberger, 35
 MTF, Trinder, pointing precision, 863
 Multiband
 Reinheimer, et al., photos, oil spills, 1277
 Roberts, viewer, 155
MULTISPECTRAL CAMERA CALIBRATION, Bernath, 939
 Multispectral camera, Fisher, 573
 Multispectral camera, viewer, Ross, 583
 Multispectral photos
 Mairs, estuarine circulation, 927
 Ross, atmospheric effects, 377
 Multiband
 Reinheimer, et al., photos, oil spills, 1277
 Roberts, viewer, 155
- N**
- Nasu, Mitsuru
 triangulation, 1215
 Wild-Heerbruggh award, 754
 Navigation for thermal IR, Sabins, 49
 Needler, D., water penetration, 359
NEW ADVANCE IN PLANETARY MAPPING, Stephens, 389
NEW COLOR FILM FOR WATER-PENETRATION PHOTOGRAPHY, Specht, Needler, Fritz, 359
 NEW CONCEPT IN ORTHOPHOTOGRAPHY, Danko, 1161
 New Jersey wetlands, Anderson & Wobber, 353
 NEW MATH MODEL FOR INDEPENDENT MODELS, Maarek, 1077
 Newton, radar, 1055
NORTHEAST RECONNAISSANCE TEST AREA, Rochford, et al., 1197
- O**
- Obituaries
 Harden, Milton J., 635
 Holmes, Robert M., 1100
 King, Jasper H., 1100
 Kulow, Donald L., 426
 Letourneau, Philip J., 530
 Maenner, Edward H., 1100
 Rhodes, Everett, 102
 Oceanography, Keene & Pearcey, 163
OCTAVE BANDWIDTH MICROWAVE SPECTRAL RESPONSE, Moore & Waite, 1051
 Oil spills, Estes, et al., 1035
 Reinheimer, et al., 1277
 Optics
 Hooker, microscopes, 283
 Hopkins, lens testing, 275
 Oregon coast, Keene, 163
ORIENTATION OF CONTINUOUS-STRIP IMAGERY, Derenyi, 1329
 Orthophoto
 Danko, instrument, 1161
 Fleming, quality, 1151
 Veign & Reeves, property mapping, 1059
- P**
- Panoramic photos
 McCash, Apollo 15, 65
 Peterson, compilation, 73
 Paine, David P., photo intensity, 473

- Patterson, William, earthquake risk, 831
 Payandeh, Bijan, photo intensity, 473
 Pearcey, William G., oceanography, 163
 Penney, LTG. Howard W., Defense Mapping Agency, 469
 Peterson, Charles G., lunar pan photos, 73
 Photo intensity bias, Payandeh, et al., 473
 PHOTO INTERPRETATION TEST DEVELOPMENT, Leachtenauer, 1187
 Photogrammetric award, *T. J. Blachut*, 743
 PHOTOGRAMMETRY AND THE FUTURE, Doyle, 243
 Photography, Hulstrom, bright spot, 370
 Planetary mapping, Stephens, 389
 PLOTTER INTERFACED WITH A CALCULATOR, Dorner & Kurtz, 1065
 POINTING PRECISION, SPREAD FUNCTIONS AND MTF, Trinder, 863
 Pope, Robert B., photo intensity, 473
 POPULATION ESTIMATES BY HUMANS AND MACHINES, Anderson, 147
 Presidential Citations, ASP, 759
 Property maps, Veigh & Reeves, 1059
 PSEUDOSTEREOSCOPY WITH RADAR IMAGERY, Newton, 1055
 Publications of ASP, 682
- Q**
 Quadricamera, Fisher, 573
 QUALITY OF PRODUCTION ORTHOPHOTOS, Fleming, 1151
 Quality vs. accuracy, Ghosh, 1179
- R**
 RADAR SHADOW FREQUENCY, Lewis & Waite, 189
 Radar, Newton, pseudostereo, 1055
 RADIOMETRIC CALIBRATION OF A MULTISPECTRAL CAMERA, Bernath, 939
 Ramey, Everett H., ISP block test, 1087
 READING FOR RESEARCH, Ghosh, 401
 RECORDING AND PROCESSING THERMAL-IR IMAGERY, Sabins, 839
 Rectification of IR, Masry & Gibbons, 845
 RECURSIVE METHODS IN DATA REDUCTION, Mikhail & Helmering, 983
 RECURSIVE PARTITIONING BY DIRECT RANDOM ACCESS, Wong, et al., 267
 Reeves, Francis B., orthophoto mapping.
 Refraction, atmospheric, Scarpace & Wolf, 521
 Region-of-the-Year award, Great Lakes Region, 757
 Regional organizations of ASP, 681
 Reinheimer, C. J., oil spills, 1311
 Reimold, Robert J., tidal marsh, 477
 Relative orientation, strip imagery, Derenyi, 1329
 REMOTE SENSING AS AN INFORMATION SYSTEM, Wellar, 1041
 REMOTE SENSING FOR DETECTING FEEDLOT RUNOFF, Wallace, 949
 REMOTE SENSING OF A BARRIER, Tuyahov & Holz, 177
 REMOTE SENSING OF ESTUARINE CIRCULATION, Mairs & Clark, 927
 REMOTE SENSING OF TIDAL MARSH, Reimold, et al., 477
 Remote sensing
 Estes, oil spills, 1035
 Gibbons, thermal IR, 845
 Newton, radar, 1055
 Sabins, 49, 839
 REPORT OF THE PRESIDENT, Altenhofen, 765
 REPORT OF THE EXECUTIVE DIRECTOR, Jacobs, 768
 Research reading, Ghosh, 401
 Reseau, moon camera, Kammerer, 60
 Resources
 Doyle, population, 243
 Slater, sensors, 197
 Rhodes, Everett M., obituary, 102
 Riggins, Robert E., television system, 851
 Roberts, L. Howard, multiband viewer, 155
 Robot camera, Fisher, 573
 Rochford, David S., P.I. test area, 1201
 Ross, Donald S.
 multispectral camera, 583
 multispectral photos, 377
 Roth, Edwin A., obituary, 207
 Rudder, C. L., petroleum spills, 1277
 Ryerson, J. M., oil spills, 1035
- S**
 Sabins, Floyd F., Jr.
 mount for 70-mm camera, 579
 Planning thermal-IR surveys, 49
 Processing thermal IR, 839
 Santoni Stereosimplex, Veress, 1219
 Scarpace, Dr. Frank L., atmospheric refraction, 521
 Schmitt, Dr. Harrison H., measure of the moon, 815
 Schowengerdt, R. A., earth resources, 197
 Schut, G. H., similarity transformation, 621
 Schwab, Capt. Charles F., test area, 1201
 SENSOR PERFORMANCE FOR EARTH RESOURCE STUDIES, Slater & Schowengerdt, 197
 SHAPE DEFORMATION IN HALOGRAMS, McDonnell, 251
 Sharp, Freeman S., digital correction, 1311
 Shim, Ivan H., color-image recorder, 395
- SHIP COLLISION CASES, Brandenberger, 35
 SIMILARITY TRANSFORMATION AND LEAST SQUARES, Schut, 621
 SIMPLE MULTISPECTRAL PHOTOS AND ADDITIVE COLOR VIEWING, Ross, 583
 SIMULATED ERTS DATA FOR COASTAL MAPPING, Wobber & Anderson, 593
 Slater, P. N., earth resources, 197
 Socioeconomy, house density, McCoy, 43
 Space photos
 Colvocoresses, cartography, 1303
 Markarian, digital processing, 1311
 Specht, M. R., water penetration, 359
 Spread functions, Trinder, 863
 SQUARE-WAVE RESPONSE OF P.I. MICROSCOPES, Hooker, 283
 Staff of ASP, 778
 Stark, E., least squares, 405
 Steever, E. Zell, 35-mm quadricamera, 573
 Stephens, James M., planetary mapping, 389
 STEREO MODELS FOR MEASURING THE SPACE SCENE, Miller, 599
 Stereoscope, Miller, 599
 STEREOSCOPY—DOGMAS OR DATA PREVAIL?, LaPrade, 1271
 Stereosimplex IIe, Veress & Nasu, 1215
 Struck, Luis, award, *T. J. Blachut*, 753
 SURVEILLANCE OF WATER QUALITY, Whipple, 137
 Sustaining Membership of ASP, 685
 Activities and work, 689
 Addresses, 686
 List (11th page of each issue), 11
 Swanson, Capt. Lawrence W., Honorary Membership award, 741
- T**
 Television system, Wong, 851
 Tensor approach to block triangulation, Ball, 81
 Twinkel, G. C., I.S.P. officer, 684
 Thaman, R. R., oil spills, 1035
 Thermal infrared
 Anderson, wetlands, 353
 Masry & Gibbons, distortion, 845
 Sabins
 flight planning, navigation, 49
 processing, 839
 Turinetti, computer analysis, 501
 Whipple, water quality, 137
 35-MM QUADRICAMERA, Fisher & Steever, 573
 35-mm photos
 Klein, pine beetle, 385
 Lo & Wong, geomorphology, 1289
 Thompson, Donald E., tidal marsh, 477
 Tidal marsh, Reimold, et al., 477
 Topology, Jancaitis, 413
 TRIANGULATION WITH STEREOSIMPLEX IIIC, Veress & Nasu, 1215
 Trinder, Dr. John C., pointing precision, 863
 Tuyahov, Alexander J., remote sensing, 177
 Turinetti, James D., automation, P.I., 501
- U**
 Urban remote sensing, Wellar, 1041
 U. V. Scanner imagery, Estes, et al., 1035
- V**
 Veign, James L., orthophoto mapping, 1059
 Veress, Prof. Sandor A., triangulation, 1215
 VIDEO-TO-FILM COLOR-IMAGE RECORDER, Montouri, et al., 395
 Viewer, multispectral, Ross, 583
 Vincent, Linwood, coastal processes, 255
- W, X, Y, Z**
 Waite, Prof. William P.
 microwave response, 1051
 radar shadows, 189
 Wallace, George Allen
 Bausch & Lomb award, 756
 remote sensing, 949
 Wasielewski, James E., holography, 617
 WATER QUALITY, Whipple, 137
 Wellar, Dr. Barry S., remote sensing, 1041
 WETLANDS MAPPING IN NEW JERSEY, Anderson & Wobber, 353
 Whipple, Dr. Janice M., water quality, 137
 Whitten, Charles A., lecture on Martin Hotine, 821
 Wild-Heerbrugg Award, Mitsuru Nasu, 754
 Wobber, Dr. Frank J.
 coastal management, 593
 wetlands, 353
 Wolf, Dr. Paul R., atmospheric refraction, 521
 Wong, F. Y., geomorphology, close-range, 1289
 Wong, Dr. Kam W.
 television system, 851
 recursive partitioning, 267
 Wright, Marshall S., Jr.
 address, 770
 installation as ASP president, 760
 1973 ASP president, photo, biography, 303