

CONTENTS

<i>J. Adamczyk</i> Application of Object Based Approach in Transboundary Research on the Eastern Border of the European Union	17
<i>M. Błaszczuk, W. Drzewiecki</i> Preliminary Assessment of Aster Images Applicability in Monitoring the Svalbard Glaciers	29
<i>S. Boczar, R. Dąbrowski, W. Fedorowicz-Jackowski, J. Zych</i> Airborne Digital Sensor Leica ADS40 and Laser Scanner ALS50, Workshop Experiences	41
<i>A. Borkowski, P. Gołuch, A. Wehr</i> Registration of the Widawa River Valley Using Airborne Laser Scanning	53
<i>A. Borkowski, G. Józków</i> Filtering of Airborne Laser Scanning Data Using a Moving Polynomial Surface Model	63
<i>A. Boroń, A. Dziejcz</i> Virtual Copy of Romanesque Relicts of St. Andrew's Church in Kraków	75
<i>A. Boroń, A. Wróbel, R. Kocierz</i> The Creation of Colour Developments' Photoplans of Frescos Located on Cylindrical Vaults Surfaces Using Both Photogrammetric and Digital Cameras	87
<i>A. Bujakiewicz, M. Kowalczyk, P. Podlasiak, D. Zawieska, E. Andrzejewska</i> Photogrammetric Measurement of Contact Surfaces of Archaeological Sculpture Elements for Relative Matching	97
<i>J. Burdziej, M. Kunz</i> Estimation of Resolution Influence and Methods of Acquiring High-Altitude Data on the Accuracy of Numeric Terrain Models and Models of Slopes and Aspects	111
<i>T. Chwastek, S. Mikrut</i> Software for Automatic Measurement of Fiducial Marks on Digital Air Images	125
<i>A. Czechowicz, S. Mikrut</i> The Use of Edge Detection Algorithms in Close Range Photogrammetry Applications	135

Contents

<i>R. Dąbrowski, W. Fedorowicz-Jackowski, M. Kędzierski, S. Różycki, P. Walczykowski, W. Wolniewicz, J. Zych</i> Evaluation of the Accuracy of DSM Generation Using a CARTOSAT-1	147
<i>R. Dąbrowski, W. Fedorowicz-Jackowski, M. Kędzierski, P. Walczykowski, J. Zych</i> Analysis of the Application of CARTOSAT-1 Imagery in Photogrammetric and Cartographic Elaborations	155
<i>W. Drzewiecki, E. Głowienka, B. Hejmanowska, M. Dżugaj, T. Trybuś</i> Assessment of the Ground Control Points Number and Digital Terrain Model Quality on the Geometric Quality of High-Resolution Satellite Orthophotomap	167
<i>I. Ewiak</i> Methodology of Generation of DEM from Russian TK-350 Stereo Images	177
<i>I. Ewiak, R. Kaczyński</i> Alternative Data for Generation of True Ortho	187
<i>B. Hejmanowska</i> GIS – a Tool in Decision Support – Risk Caused by Data Quality Effect	197
<i>B. Hejmanowska, W. Drzewiecki, E. Głowienka, S. Mularz, B. Zagajewski, J. Sanecki</i> Assessment of Integration of Hyperspectral Satellite Image with Non-Imaging Field Spectrometer Measurements – Dobczycki Reservoir Example	207
<i>J. Jachimski, S. Mikrut</i> Proposal for the Imaging Geoinformatic Circle’s Activities Connected with the Project of the ”PAU Dictionary and Glossary of Terms for Geoinformatics”	217
<i>A. Janowski, P. Sawicki, J. Szulwic</i> A Close Range Photogrammetric Database as a Network Application	227
<i>A. Janowski, P. Sawicki, J. Szulwic</i> The 3D Visualization Method of Close Range Objects in the OpenGL Standard	239
<i>J. Jelonek, I. Wyczałek</i> Automatic Urban Change Detection in Aerial Images	249
<i>R. Jędrzycka</i> The Use of Google Earth in a User Application for the Internet Visualization of Geographical Data	259

Contents

<i>M. Kaczmarczyk, M. Kowalczyk</i> Reconstruction of the Spatial Shape of a Small Archaeological Object Based on Digital Non-Metric Photographs.....	269
<i>M. Kamiński</i> Landslide GIS Analysis for a Selected Area of the Dynowskie Foreland	279
<i>A. K. Karwel, I. Ewiak</i> Estimation of the Accuracy of the SRTM Terrain Model in Poland	289
<i>H. Klimkowska, A. Wróbel</i> Some Remarks Concerning the Use of Reflectorless Total Stations for Architectural Recording	297
<i>R. Koprowski, R. Tokarczyk, Z. Wróbel</i> Methods of Image Analysis Used for Automatic Detection of Human Eye Pupils	305
<i>R. Koprowski, Z. Wróbel</i> Properties of Selected Neural Network Types Used for the Detection of the Position of Patient's Eyes	319
<i>K. Kosiński, A. Hoffmann-Niedek</i> The Application of the Size and Shape Analysis in Meadow Classification on Landsat ETM+ Images	331
<i>K. Kosiński, A. Hoffmann-Niedek, A. Zawila</i> Distinguishing Landscape-Vegetation Complexes on Landsat ETM+ Images Using a Region Growing Procedure	341
<i>P. Koza</i> Orientation of Ikonos Stereo Images and Automatic Acquisition of Height Models	351
<i>K. Krawiec, I. Wyczątek</i> Supervised Road Detection Using Machine Learning Methodology	361
<i>M. Kunz</i> The Variation of Spatial Landscape Pattern Based on Cartographic and Remote Sensing Data	373
<i>Z. Kurczyński, W. Wolniewicz</i> Very High Resolution Satellite Images as a Source for Preparation of Vectorial Data in TBD Standard	385

Contents

<i>B. Kwoczyńska, Ł. Placzek</i> A Non-Metric CANON EOS 300D Camera Application for Architecture Object 3D Visualization.....	395
<i>A. Lubecki</i> Study of Changes in the Shape, Size and Temperature of Some Field Elements on Thermograms with Time and Distance Delays in Their Registration	403
<i>W. Mierzwa</i> Detection of Close Range Digital Image Signalized Points Using GIS Analysis	415
<i>S. Mularz, W. Drzewiecki, B. Hejmanowska, T. Pirowski</i> Using of Satellite Remote Sensing for Water Contaminants Accumulation Process Assessment in Dobczyce Reservoir	425
<i>Z. Paszotta</i> Photogrammetric Applications Using Internet Browsers	437
<i>Z. Paszotta</i> Selected Cases of Radiometric Correction of Aerial Photographs	449
<i>Z. Paszotta, M. Szumiło</i> Verification of the Digital Terrain Model	457
<i>Z. Perski, G. Ketelaar, M. Mróz</i> SAR Persistent Scatterers: Targets Characterization in Urbanized Areas with ENVISAT Alternating Polarisation Data	467
<i>A. Plichta</i> Research of Manual Vectorization Accuracy for Rail Infrastructure Objects Using a Satellite Orthophotomap	483
<i>R. Preuss, J. Dygaszewicz</i> Orthophotomap in the Network – the GEOPORTAL Project	495
<i>R. Preuss, W. Wolniewicz, S. Różycki</i> Attempt to Increase Informative Value of Digital Orthophotomaps	505
<i>K. Pyka, A. Rzonca</i> Analysis of the Radiometric Quality of Orthophotograms Generated by the Integration of Close Range Photogrammetry and Laser Scanning	515
<i>M. Szumiło, M. Mróz, W. Jach</i> Production of a Digital Orthophotomap for the Olsztyn Beltway Project	527

Contents

<i>P. Tymków, A. Borkowski</i> The Use of Airborne Laser Scanning Data to Land Cover Supervised Classification for Hydrodynamic Modelling	537
<i>P. Wężyk</i> Integration of Geoinformation Technologies in an Analysis of Hurricane Damage to the Pisz Primeval Forest	547
<i>P. Wężyk, K. Pyka, I. Jędrychowski</i> The Influence of Digital Elevation Model Quality on the Orthorectification of VHRS IKONOS-2	557
<i>W. Wolniewicz, M. Zaremba</i> Use of Airborne Laser Scanning Data as the Geometric Control for Correcting QuickBird Images	567
<i>I. Wyczątek</i> The Use of Decision-Making Cellular Automata in the Classification of Remote Sensing Images	577
<i>A. Zarnowski, A. Sobieraj</i> Geoinformation Technology and GIS – Problems and Perspectives	587
<i>Z. Zdunek, I. Wyczątek</i> A Study of the Influence of GCP Distribution on the Quality of QuickBird 2 Image Calibration Using the Physical Sensor Model	597
<i>J. Ziobro</i> Pre-Adjustment Detection of Gross Errors in GPS Measurement for Aerial Triangulation	609
<i>J. Ziobro</i> Efficiency of Additional Parameters in Aerialtriangulation	619