

WORKSHOP PROGRAM

	Day 1	
9.30 à€ 10.20	Opening Session <i>(Local authority, tbd) : Welcome</i> <i>F. Tupin, M. Roux, ENST: Introduction to the Urban Remote Sensing Joint Event</i> <i>Paolo Gamba & C. Juergens: Highlights of the Technical Program</i> <i>M. Crawford, IEEE GRSS: Urban Remote Sensing & IEEE GRSS Strategic Plan</i>	
10.20 à€ 11.05	Plenary Session <i>C. Elvidge, NOAA: Change detection in satellite observed nighttime lights: 1992 - 2003</i>	
11.05	URBAN Poster Session opening	
11.05-11.20	Coffee break	
11.20 à€ 13.00	Algorithms for urban area disaster assessment through remote sensing <i>Chair: P. Gamba (Univ. of Pavia)</i>	
13.00 à€ 14.30	Lunch Break	
14.30 à€ 15.50	Techniques for 3D urban analysis by means of SAR sensors I <i>Chair: G. Fornaro (CNR-IREA, Italy)</i>	Urban Climatology <i>Chair: C. Juergens (Ruhr Univ. Bochum)</i>
15.50 à€ 16.10	Coffee break	
16.10 à€ 17.30	Novel simulation and interpretation methodologies <i>Chair Y. Jin (Fudan University)</i>	Morphological tools for urban remote sensing <i>Chair F. Del Frate (Univ. of Rome Tor Vergata)</i>
17.30 à€ 18.20	URBAN Poster Session Tour	
	Day 2	
8.40 à€ 10.20	Techniques for multi-sensor data fusion and urban area interpretation <i>Chair: B. Csathó;½ (Univ. at Buffalo)</i>	Urban Development and Growth Tracking <i>Chair: B. Dousset (Hawaii Institute of Geoph. and Planet.)</i>
10.20	URBAN/URS Poster Session opening	
10.20 à€ 10.40	Coffee break	
10.40 à€ 12.00	Urban Remote Sensing Applications <i>Chair: D. Maktav (Techn. Univ. Instambul)</i>	Techniques for 3D urban analysis by means of SAR sensors II <i>Chair: G. Fornaro (CNR-IREA, Italy)</i>
12.00 à€ 12.45	Plenary Session <i>D. Balk, City University of New York: New Directions in Social Science Applications of Urban Remote Sensing: Old questions, new approaches, remaining gaps.</i>	
12.45 à€ 14.15	Lunch Break	
14.15 à€ 16.15	Algorithms and techniques for urban area monitoring <i>Chair: J. Chanussot (INP Grenoble)</i>	
16.15 à€ 16.30	Coffee break	

16.30 -17.15	Plenary Session G. Hepner, ASPRS: Trends in the U.S. Remote Sensing Industry Forecast- Implications for Urban Remote Sensing	
17.15 - 18.00	URBAN/URS Poster Session Tour	
19.30	Social Event	

Day 3		
8.40 - 10.20	Change Detection Chair: F. Dell'Acqua (Univ. of Pavia)	Algorithms and techniques for remotely sensed data interpretation in urban areas Chair: C. Slatton (Univ. of Florida)
10.20 - 10.40	Coffee break	
10.40 - 11.40	Panel Discussion Data Provider Requirements for Urban Remote Sensing Moderator: W.J. Emery (Univ. of Colorado) M. Tremblay (DigitalGlobe): The new generation of VHR sensors and their impact on Urban Remote Sensing F.M. Seifert (ESA): Urban Remote Sensing and the GMES initiative A. Roth (DLR): Challenges for Urban Remote Sensing by high resolution satellite SAR data H. MacKay (Intermap Technologies) : Airborne IFSAR for 3D geometry: challenges and opportunities in urban environments	
11.40 - 13.00	Algorithms for urban area cartographic feature extraction Chair: U. Soergel (Univ. of Hannover)	3D Urban Characterization Chair: D. Riccio (Univ. of Naples Federico II)
13.00 - 14.30	Lunch Break	
14.30 - 16.10	Structure detection and characterization in urban areas Chair: P. Sarabandi (Stanford Univ.)	High resolution SAR and urban areas Chair: U. Stilla (Techn. Univ. Munich)
15.40 - 16.00	Closing Session	

Paper and Session

Plenary Session

C. D. Elvidge

K.E. Baugh, A.T. Howard, P.C. Sutton,
E.H. Erwin

Change detection in satellite observed nighttime lights: 1992 - 2003

Algorithms for urban area disaster assessment through remote sensing

E. Sertel	S. Kaya, P.J. Curran	The use of geostatistical methods to identify severe earthquake damage in an urban area
A.-L. Chesnel	M. Binet, L. Wald	Quantitative assessment of building damage in urban area using very high resolution images
S. Stramondo	C. Bignami, N. Pierdicca, M. Chini	SAR and optical remote sensing for urban damage detection and mapping: case studies
H. Miura	F. Yamazaki, M. Matsuoka	Identification of Damaged Areas due to the 2006 Central Java, Indonesia Earthquake Using Satellite Optic
M. Matsuoka	F. Yamazaki, H. Ohkura	Damage Mapping for the 2004 Niigata-ken Chuetsu Earthquake Using Radarsat Images
T. Thuy Vu	F. Yamazaki, M. Matsuoka	Context-based detection of post-disaster damaged buildings in urban areas from satellite images

Techniques for 3D urban analysis by means of SAR sensors I

F. Lombardini	L. Roessing, J. Ender, F. Viviani	Towards a Complete Processing Chain of Multibaseline Airborne InSAR Data for Layover Scatterers Separated by Urban Areas
D. Perissin	C. Prati	Target recognition by means of spaceborne C-band SAR data
G. Fornaro	L. Cascini, S. Ferlisi, D. Peduto, S. Di Nocera, F. Serafino	A land subsidence study via DInSAR technique over large urbanized areas
R. Zschneider		Physical Characterisation of Coherent Scatterers and Applications

Urban Climatology

A. Y. Kwarteng	C. Small	Remote Sensing Analysis of Kuwait City's Thermal Environment
Q. Weng	B Liang, D. Lu	The spatial variability of urban land surface temperature
B. Dousset	F. Gourmelon, E. Mauri	Application of satellite Remote Sensing for Urban Risk Analysis: a case study of the 2003 extreme heat w

Novel simulation and interpretation methodologies

J. Delli_re	A. Maruani, H. Maitre	SAR measurement simulation on urban structures using a FDTD technique
R. Guida	G. Franceschetti, A. Iodice, D. Riccio, G.Ruello, Uwe Stilla	Simulation Tools for Interpretation of HR SAR Images of Urban Areas
D. Weihsing	S. Hinz, F. Meyer, R. Bamler, S. Suiland	An Integral Detection Scheme for Moving Object Indication in Dual-Channel HR Spaceborne SAR Images
J. Leitloff	S. Hinz, U. Stilla	Estimation of traffic parameters in urban areas from satellite images

URBAN Poster Session

A. Zotaj		Application of GIS & RS Technology for land management and informal human settlement in Albania
Y.-Q. Jin	E. Dai	Reconstruction of the 3D Stereo Buildings from Polarimetric SAR Images in Two Converse Flights
M. Ravanbakhsh	C. Heipke, K. Pakzad	Knowledge-based road junction extraction from high-resolution aerial images
K. Lee		3D Urban Modeling and Rendering with High Resolution RS Imagery on Mobile 3D and Web 3D Environn
H. Tang	N. Boujermaa, H. Maitre	Similarity Measure for Remote-Sensing Images with Heterogeneous Contents
J.G. Reyas Ayuga	R. Martinez Marin, J.A. Malpica Velasco	Hyperspectral Remote Sensing Application for Semi-Urban Areas Monitoring
B. Jutzi	U. Stilla	Simulation and Analysis of Full-Waveform Laser Data of Urban Objects
F. Del Frate	F. Pacifici, D. Solimini	Urban Land Cover in Rome, Italy, monitored by Single-Parameter multi-temporal SAR Images

E. Michaelsen	L. Doktorski, Uwe Soergel, Uwe Stilla	Perceptual Grouping for Building Recognition in HR SAR Images using the GESTALT-System
A. Peeters	Y. Etzion	Developing an Automated System, Based on remotely Sensed Data, for Recognizing the Effect of Climate Morphology of Urban Open Spaces
C. Small		Comparative Analysis of Urban Vegetation Scale and Abundance
C. Weber	A. Wania	Hyperspectral imagery and urban green observation
Z. Kang	S. Zlatanova, B. Gorte	Automatic Registration of Terrestrial Scan Data based on Matching Corresponding points from Reflectivity
L. Martinez	V. Pal_, R. Arbiol, L. Pineda, M. Joaniquet	Urban Change Detection on Satellite Image Series. Application to Catalunya Area
C. Iovan	D. Boldo, M. Cord	Automatic Extraction of Urban Vegetation Structures form HR Imagery and Digital Elevation Model
F. Tarsha-Kurdi	T.Landes, P. Grussmeyer	Joint combination of point cloud and DSM for 3D building reconstruction using airborne laser scanner data
R. Sugumaran	M Voss	Object-Oriented Classification of LIDAR-Fused Hyperspectral Imagery for Tree Species Identification in an Environment
E. Schoepfer	S.Lang, D.Tiede, P.Zeil	Damage assesment in townships using VHR data
M. Shinozuka	P. Chou, M. Feng, A. Mosallam	Wireless MEMS - Sensor Networks for Monitoring and Condition Assesment of Lifeline Systems
R. Liu	D. Burschka, G. Hirzinger, B. Strackenbock	Real Time Fully Autmatic 3D Modelling of HRSC Landscape Data
J. Farret	J.F. Rotg_	Universal Solid 3D Format for High Performance Urban Simulation
A. Garzon		The long and unpaved road for an Urban Atlas for Europe

Morphological tools for urban remote sensing

A. Mestar	P. Vannoorenberghe, G. Flouzat	Mathematical Morphology applied to VHR Spatial Images Interpretation
S. Aksoy	H. G. Akcay	Morphological Segmentation of Urban Structures
M. Fauvel	J. Chanussot, J. A. Benediktsson	How Transferable are Spatial Features for the Classification of VHR Remote Sensing Data?
S. Lefevre	J. Weber, D. Sheeren	Automatic Building Extraction in VHR Images using Advanced Morphological Operators

Techniques for multi-sensor data fusion and urban area interpretation

S.R. Lach	J.P. Kerekes	Multisource Data Processing for Semi-Automated Radiometrically Correct Scene Simulation
E. Mer_nyi	B. Csatho, K. Tesdemir	Knowledge discovery in urban environments from fused multi-dimensional imagery
T. Schenk	B. Csatho	Fusing imagery and 3D point clouds for reconstructing visible surfaces of urban scenes
J.J. Ceceres	K.C. Slatton	Improved Classification of Building Infrastructure from Airborne Lidar Data Using Spin Images and Fusion Ground-Based Lidar
A. Yilmaz		Sensor fusion in computer vision

Urban Development and Growth tracking

M. Kasanko	C.Lavalle, J.I.Barredo, V. Sagris, L. Petrov, K. Steinoccher, W. Loibl	GEOLAND Spatial Planning Observatory
I. Sandric	B.Mihai, I.Savulescu, Z. Chitu, B. Suditu	Change Detection Analysis for Urban Development in Bucharest - Romania using HR Satellite Imagery
D. Pei-jin	Z. Huapeng, P. Chen, Y Zuoxia	Urban Green Space Pattern Analysis and Environmental Impacts Assessment based on RS and GIS
M. Kasanko	V. Segris, C. Lavalle	Analysing the compactness of urban areas by using indicators derived from data acquired by remote sens
J. Shan	S. Al-Kheder, J. Wang	Cellular automata urban growth model calibration with generic algorithms

Techniques for 3D urban analysis by means of SAR sensors II

G. Ferraiuolo	G. Ferraioli, V. Pascazio, G. Schirinzi	Phase offeset estimation for DEM reconstruction in multi-channer SAR interferometry
G. Fornaro	A. Pauciullo, F. Serafino	Multipass SAR Imaging and Deformation Monitoring in Small and Large Areas
S. Duque	J.J. Mallorqui, P. Blanco, D. Monells	Application of the Coherent Pixels Technique (CPT) to urban monitoring

L. Pipia	A. Aguasca, X. Fabregas, J. Mallorqui, C. Lopez-Martinez, J. Marturi_	Mining Induced Subsidence Monitoring in Urban Areas with a Ground-Based SAR
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Urban Remote Sensing Applications

K. Steinnocher	M. Koestl	Mapping Urban Function by Integrating Socio_economic Information, Address Data, and Remote Sensing
F.M. Sims	V.T. Mesev	Use of Ancillary Data in Object-Based Classification of HR Satellite Imagery
D. Pei-jun	Z.Huapeng, P. Chen, L. Pei	Application of Multi-source RS Information to Urban Environment Monitoring in Mining Industrial Cities
B. E. Alhaddad	M. C. Burns, J. R. Cladera	Texture Analysis for correcting and detecting classification structures in Urban Land Uses "Metropolitan area - Spain"
M. Bochow	K. Segl, H. Kaufmann	Automating The Build-Up Process of Feature-Based Fuzzy Logic Models for the Identification of Urban Biomes from Hyperspectral Remote Sensing Data
S. Niebergall	A. Loew, W. Mauser	Object Oriented Analysis of very High Resolution Quickbird Data for the Mega City Delhi/India

Algorithms and techniques for urban area monitoring

M. Pesaresi	E. Pagot	Post-conflict reconstruction assessment using image morphological profile and fuzzy multicriteria approach on 1-m-resolution satellite data
C.D. Elvidge	P. Cinzano, D.R. Pettit, P.C. Sutton, C. Small	Overview of the NightSat mission concept
E. Banzhaf	K. Hannemann, M. Martini, V. Grescho, M. Neitzband	Monitoring the urban development with integrated system from RS observation and GIS information
D. Balk	S.V. Nghiem, E. Rodriguez, C. Small	New Methods for Understanding Intra-urban Contours at a global scale:an application of Dense Sampling with QuickSCAT Scatterometer with Population and Housing Data
S. Sim	-	Spatio-temporal dynamics in Seoul Metropolitan Region: Linking Remote Sensing into Urban Theory
M. Pesaresi	A. Gerhardinger, F. Kayitakire	Monitoring settlement dynamics by anisotropic textural analysis by panchromatic VHR data

P. Villa

Imperviousness Indexes Performance Evaluation for Mapping Urban Areas using Remote Sensing Data

URBAN/URS Poster Session

V. Prinet	F. Tang	Computing Invariants for Structural Change Detection in Urban Areas
H. Topan	G. Buyuksalih, D. Maktav	Mapping potential of Orbview-3 panchromatic image in mountainous urban areas: results of Zonguldak te:
D. Riccio	G. Di Martino, A. Iodice, G. Ruello	Monitoring of flooding in urban areas
T. Krauss	P. Reinartz, M. Lehner, Uwe Stilla	Coarse and fast modelling of urban areas from high resolution stereo satellite images
Y. Zhang	K. Amolins, P. Dare	Applications of wavelet transforms in image fusion
A. Ehsani		Study the role of thermal band for landcover mapping of urban area in arid lands
W.J. Emery	M. Chini, N. Pierdicca	Land Cover Change Detection of the Demolition of the Rocky Flats Nuclear Site
F. Dell'Acqua	P. Gamba, G. Lisini, L. Odasso	Object-oriented building damage analysis in VHR optical satellite images of the 2004 Tsunami over Kalut
J.R. Muller	D.J. Harding	Using Lidar Surface Deformation Mapping to Constrain Earthquake Magnitudes on the Seattle Fault in W
T. Al-Awadhi	_	Monitoring and Modelling Urban Expansion Using GIS & RS: Case Study from Muscat, Oman
P. Gamba	G. Trianni, F. Dell'Acqua, M. Stasolla	GIS and remote sensing for disaster management in urban areas
A. Omojola	Mayowa Fasona	GIS as a Tool for efficient functioning of local governments in Nigeria- Case study of Ifako-Ijaye LGA in La
C.-Y. Su	H.-T. Liu, W.-S. Ou	The relationship between urban greening with thermal environment
F. A. Mkrtchyan	V.F. Krapivin	Microwave Radiometry Technology for the Nature Society System Biocomplexity Assessment
I.B. Shirokov		Measurements of the Radius of Atmosphere Surface Layer Pollution near the Plant with Microwave
M. Stathopoulou	C. Cartalis	Study of the Urban Heat Island of Athens, Greece during daytime and night-time
A. Roth	H. Taubenbock, I. Pengler, B. Schwaiger, S. Cypra, M. Hiete	A multi-scale urban analysis of the Hyderabad metropolitan area using remote sensing and GIS

B. Bessaa	A. Belhadj-Aissa	VTQ-Tree:quadtree access method with Variable Threshold
H. Esbah	B. Deniz, B. Kara, L. Atatanir	Monitoring Urban Development near a protected area
A. Darwish	S. Elghazali, A. Shakweer	The Effect of Ring Road Construction on Urban Land Cover Change: Greater Cairo Case Study
E. Diermayer	P. Hostert	Assessing post-socialist urban change with Landsat data

Change Detection

T. C. Hutchinson	Z. Chen	A Probabilistic Classification Framework for Urban Structural Damage Estimation using Satellite Images
F. Del Frate	F. Pacifici, C. Solimini, W. J. Emery	A new Neural Architecture for detecting urban changes in Quickbird Imagery
Mario Costantini	P. Lombardo, F. Orsomando, M. Zavagli	SAR and Optical Data Fusion for Change Detection
B. van den Broek	R. Dekker, K. Gutjahr, H. Raggam	Use of high resolution optical and radar imagery for intelligence and situational awareness in urban areas
Y. Ban	H. Hu	RADARSAT Fine-Beam SAR Data for Land-Cover Mapping and Change Detection in the Rural-Urban Fringe of the Greater Toronto Area
S.B. Serpico	L.Cannavacciulo, W.J. Emery, G.Moser	A contextual change detection method for high-resolution optical images of urban areas

Algorithms and techniques for remotely sensed data interpretation in urban

H. Taubenbock	A. Roth	A Transferable and Stable Object Oriented Classification Approach in Various Urban Areas and Various Sensors
C. Sanchez Hernandez	C. Gladstone, D. Holland	Classification of Urban Features from Intergraph's Z/I Imaging DMC high resolution images for integration into the detection flowline within Ordnance Survey
L. Hoegner	U. Stilla	Texture Extraction for Building models from IR sequences of urban areas
L. Ferro-Famil	E. Pottier	Urban area remote sensing from L- Band POLSAR data using Time-Frequency techniques
A. Mohammadzadeh M.J.Valadan Zoej, A. Tavakoli		New fusion method applied on IKONOS satellite images of urban and rural areas

3D urban characterization

P. Sarabandi	A. S. Kiremidjian	Terrain-Dependent Correspondence Search for 3D Urban Modeling Using Multiple High-Resolution Satell
K. Schulz	A. Thiele, U. Thoennessen, U. Soergel, E. Cadario	Model Based Building Recognition from Multi-Aspect InSAR Data in Urban Areas
Y. Zhang	P. Xie, H. Li	Multi-scale colour 3D satellite imagery and global 3D Web mapping
S. Ahlberg	U. Soderman, G. Tolt	3D Urban Models from Laser Radar Data
S. Sauer	L. Ferro-Famil, A. Reighber, E. Pottier	3D Visualisation and Physical Feature Extraction of Urban Areas using Multibaseline POL-InSAR data at

Algorithms for urban area cartographic feature extraction

K. Pakzad		Structural Interpretation of high resolution images
N. Pfeifer	M. Rutzinger, F. Rottenstriner, W. Muecke, M Hollaus	Extraction of building footprints, vegetation and open areas from airborne laser scanning – comparison of and validation techniques
N. Paparoditis	L. Boudet, O Tournaire	Automatic man-made object extraction and 3D scene reconstruction from geomatic images
N. Haala	S. Becker, M. Kada	Cell Decomposition for Building Model Generation at Different Scales
J. Hyppa	L. Matikainen, H. Kaartinen, X. Yu, H. Hyppa, P. Ronholm	Improving Automation in Map Updating Based on National Laser Scanning, Object-Based Change Detect Object Reconstruction

High resolution SAR and urban areas

P. Gamba	F. dell'Acqua, G. Trianni	Satellite SAR and Human Settlement Detection
V. Le Moigne	F. Tupin, J.-M. Nicolas	Statistical Polygonal Snakes for 3D building reconstruction using High Resolution SAR data
K. Hedman	S. Hinz, U. Stilla	Road extraction from SAR multi-aspect data supported by a statistical context-based fusion strategy
U. Soergel	A. Thiele, H. Gross, U. Thoennessen	Extraction of Bridge Features from high-resolution InSAR Data and optical Images
F. Meyer	S. Gernhardt, N. Adam	Long-Term and Seasonal Subsidence Rates in Urban Areas from Persistent Scatterer Interferometry

Structure detection and characterization in urban areas

A. Plaza	P. Gamba, G. Trianni, J. Plaza	Efficient multi-band texture analysis for remotely sensed data interpretation in urban areas
F. Del Frate	R. Duca, D. Solimini	Urban Features Retrieved by Hyperspectral Multi-Angle Chris Proba Images
A. Grote	M. Butenuth, M. Gerke, C. Heipke	Segmentation Based on Normalized Cuts for the Detection of Suburban Roads in Aerial Imagery
A. Reigber	M. Jaeger, L. Ferro-Famil, O. Hellwich	Detection and Classification of Urban Structures based on a high-resolution SAR imagery
P. Gamba	F. Dell'Acqua, G. Lisini	Raster to Vector in 2D Urban Data
I. Jermyn	T. Peng, V. Prinet, J. Zerubia	Urban road extraction from VHR images using a multiscale approach and a phase field model of network