

The International Archives of Photogrammetry and Remote Sensing

Volume XXXII, Part 6W7

ISPRS WG VI/3 International Cooperation and Technology Transfer

Table of Contents

Foreword	III
Table of Contents	V
Compte-rendu of the WG VI/3 Mariano Cuniatti Memorial Meeting in Parma, by Mojca Kosmatin Fras	XI
Compte-rendu of the WG VI/3 High Level Tutorial in Bandung, by Fahmi Amhar	XXV
Compte-rendu of the WG VI/3 Luigi Solaini 10 th Anniversary Memorial Symposium in Cotonou, by Luigi Mussio	XVII
Opening	XX
Closure	XX
Welcome addresses	XXI
Opening	XXV
Closure	XXV
Padua,, Bahia Blanca, Perugia, Parma, Bandung and Cotonou Meetings – List of Participants	XXVI
ISPRS WG VI/3 – List of Correspondent Members	XIX
Achilli V., Barison F., Vettore A. Virtual Reality (VR) Applied to Environment Representations: Some Examples at University of Padua (Italy)	1
Achilli V., Borgstrom S., Capone M., Del Gaudio C., De Martino P., Klees R., Ricciardi G.P., Ricco C., Sepe V., Usai S., Vettore A. Surveying Methodologies in the Phlegrean Volcanic District (Naples – Italy)	6
Al-Bayari O., Barbarella M., Fazio C. Integration of GPS and Conventional Surveying for Positioning of the Mobile Phone Antennae in a Local System	13
Albertella A., Migliaccio F., Sansò F. The Spacewise Approach to the Data Treatment for the SAGE Mission Project	21
Albery E., Rinaudo F. Data and Metadata – A New Concept in Archiving Architectural Data	26
Aminti P., Chiaverini I., Ostuni D. Notes about Topographic and Photogrammetric Surveying for the Investigation of the Dome Bearing Vertical Walls in S. Maria del Fiore Cathedral of Florence	31
Astori B., Rinaldi L., Tucci G. New Survey of Morimondo Abbey	38

Barbarella M., Fiani M. Sarno (Italy) Landslides: Different Methodologies of Data Acquisition	44
Barbarella M., Vettore A. Digital Photogrammetry and Laser Range Camera for Physics Model Geometry Determination	52
Barrile V., Nocera R. Sampling and Variance Analysis in Reggio Calabria	57
Barzaghi R., Borghi A., Dominici D., Gandolfi S. Geoid Estimation Through GPS Observations	61
Bellone T., Mussio L., Nardinocchi C. Data Processing Versus Geomatics	67
Bessis J.L., Nadal R. Pertinence de l'Offre de Formation du GDTA à l'International	72
Bezoari G. The Architectural and Archaeological Photogrammetrical Experiences in Greece and Middle Asia	77
Bezoari G., Guzzetti F. Procedures Optimisation in the Quality System	82
Bezoari G., Selvini A. Cartography for Town Planning	85
Biagi L., Brovelli M.A., Negretti M., Saldarini C. Indexing Tree Methods and Spatial Ordering for Maps and Geographic Data: an Overview and Application to the Geodetic GIS Project	89
Boccardo P., Comoglio G., Corgiati Loia N. GIS/WEB Design for Internet/Intranet Data Sharing	97
Bologna R., Minchilli M. Surface Spatial Analysis in Architectural and Archaeological Survey: Digital and Analytical Procedures	101
Bologna R., Minchilli M. Very Large Scale Mapping of the Archaeological Site in Cerveteri (Italy): Data Collection From Digital Automatic D.T.M., Orthoprojection and Analytical Stereoplotting	107
Boursier P., Bouju A., Stockus A., Bertrand F., Eboueya, M., . Des Composants Logiciels Géographiques pour Élargir et Démocratiser l'Accès à la Technologie et à l'Information Géographique	112
Broglia P., Malinverni E.S., Mussio L. Validation of an Ancient Perspective in Lecco (Italy)	120
Brovelli M.A., Migliaccio F., Tornatore V. The Use of Spatial-Oriented Data Base Management Systems (DBMS) for Italgeo Geoid Management by GIS	125

44	Capra A., Gandolfi S., Lombardini G., Zanutta A.	132
	Comparison Between Photogrammetrical Surveys of the St. Stefano Church's Cloister in Bologna and Metrics Evaluations of the Operations of Restoration	
52	Caprioli M., De Fazio P.	139
	Experimental Tests in Digital Images Plotting	
57	Carmona-Moreno C., Turchini M., Cruz Martinez M.F., Baron J., Lopez Raya José J., Moreno Ruiz A.	145
61	GVM-GAC Processing Chain: a Remote Sensing Tool for Enviromental Applications at Continental Level	
67	Carollo D., Bucciarelli B., Gai M., Lattanzi M.G., Cesare S.	146
	GAIA: Global Astrometry From Space at 10 μs Level	
72	Caroti G., Mengali E., Rossi A., Scalese C.	154
	Establishment of a Levelling Network for the Monitoring of Possible Vertical Movements in the Area of Pisa-San Giuliano Terme-Pontasserchio-Migliarino Pisano (Italy)	
77	Casella V.	159
	Estimating Measurement Precision by Means of Measurement Differences	
82	Ciolfi M., Zatelli P.	163
	Automatic Forest Area Recognition Using GIS Image Analysis Capability	
85	Colombo A., Lechi G.	169
	New Approach to the Estimation of Snowpack Estension Via Remote Sensing	
89	Colombo L., Marana B.	173
	Cultural Heritage Web Sites: the Support of Geomatics	
97	Cortelazzo G.M., Guarnieri A., Vettore A.	179
	A Method for Estimating 3D Shapes Motion by a Frequency Domain Technique	
101	Coulibaly A.	183
	La Formation au C.R.T.O	
107	Crocetto N., Gatti M., Materazzo C., Toscano L.	185
	A Computer Program for the Variance-Covariance Estimation of GPS Baseline Vectors	
112	Crosetto M., Crippa B.	193
	Interferometric SAR Calibration	
120	Diakite H. C.	202
	Optimisation des Dates d'Acquisition des Images Teledection en Zone Soudano-Guineenne Pour un Suivi des Ecosystemes	
125	Dominici D., Pecetti M.L., Radicioni F., Stoppini A.	206
	Field Tests on DGPS Using OmnistarTM Correction	

Fangi G.	214
Control Directions for the Calibration of Terrestrial Non-metric Cameras	
Fangi G., Gagliardini G.	218
Experiences of Virtual Reality	
Fangi G., Nardinocchi C.	229
The Grid Method, a Simple Procedure for the Determination of the Lense Radial Distortion	
Fiani M., Troisi S.	236
DEM's Comparison for the Evaluation of Landslide Volume	
Forlani G., Pinto L.	244
Automatic DEM Generation in Quarries	
Giussani A., Vassena G.	250
Static Control of Palazzo della Regione in Padua	
Gross C.P.	254
Conditions Préalables au Fonctionnement Efficace et Durable d'un SIG à Base de Télédétection	
Guarnieri A., Vettore A.	258
Procedures of Correction of the Geometry Distorsions for Digital Images	
Guerra F., Balletti C., Miniutti D.	266
Geoplantrasf: a Software for the Georeferencing of Digital Images by Using Plane Transformations	
Gueye A.L., Agbo B. F., Kibora P.M.	272
La Decadence en Production Cartographique en Afrique: Causes et Therapies de Redemarrage	
Gueye A.L., Aguda O.	273
Geomatics Education in Nigeria: the Current Drives	
Happi Mangoua F.	274
De la Topographie Conventionelle Vers la Geomatique: une Évolution Technologique de l'Enseignement Technique Dans le Système Éducatif Camerounais	
Herrmann L., Vennemann K., Stahr K.	285
Internet-Atlas of Natural and Agronomic Resources in Niger and Benin - A Tool for Presentation and Exchange of Spatial Data -	
Konecny G.	286
Mapping from Space	
Kosmatin Fras M.	291
Contemporary Metrical Documentation of Cultural Heritage Architecture	
Kraus K.	298
Acquisition of Topographic Data by Laser Scanning and Digital Photogrammetry	

214	Long A., Estberg L., Wilson M., Jacquez G. The GeoMed Project: GIS and Spatial/Temporal Statistics in Public Health	299
218	Manzoni G. GPS and GLONASS in Italy	306
229	Maphale L., Manisa M.B., Nkwae B., Ezigbalike C. Geomatics Education and Training in Botswana	309
236	Mari L. The Twofold Nature of Measurement as Empirical and Linguistic Operation	310
244	Mari L. Uncertainty in Measurement: a Survey	313
250	Midulla P. A Rectification of Digital Images Obtained from an Analogical Videorecording	316
254	Milanesi L., Rizzi R. Gene Fuctional Mapping	321
258	Mgendi M.F. The Application of Geographic Information Systems in Enviromental Impact Assessment in Africa: Challenges and Opportunities	330
266	Monti C., Brumana R., Fregonese L. GIS: Teaching Experience in the Course at DIAR Politecnico of Milan	333
272	Monti C., Brumana R., Fregonese L., Vassena G. GIS Technology to Support Survey Data and Management of Different Quarry Typologies	344
273	Oussedik A., Trache M.A. La Formation et la Recherche au Centre National Des Techniques Spatiales	351
274	Perdomo R., Del Cogliano D., Di Croche N., Napal E., Aldalur B., De Aduriz A.M., Napal P., Plana N., Pintos I., Martinez M.A., Rosso S. Geoid Behaviour in the Bahia Blanca Area	359
285	Perdomo R., Del Cogliano D., Di Croche N., Napal E., Aldalur B., Napal P., Pintos I. Geoid Modelling in the Southern Region of the Buenos Aires Province	360
286	Qüesta E., Yanicelli R., Fares V., Luna L., Goldar E., Sandez D., Isorni C., Costa W., Tonelli E. Satellital Imaging, Information Support of a Provincial Cartographic Project	361
291	Ridder R., Montfraix B., Lombardo S. Formation et Projects en Geomatique Mis en Place Par l'Association Pour le Developpement de l'Information Enviromentale (Adie) en Afrique Centrale	376
298	Ruzgiene B. Construction of Basic Digital Map for City GIS by Stereophotogrammetric Approach	379

Sansò F., Albertella A., Bianco G., Della Torre A., Fermi M., Iafolla V., Lenti A., Migliaccio F., Milani A., Rossi A.	380
SAGE: an Italian Project of Satellite Accelerometry	
Sausen T.M.	
The Teaching of Remote Sensing in South America	384
Sibiry Traoré P.C., Doumbia M.D., Sissoko S., Yorotè A., Wagner W., Scipal K., Gobin A., Campling P., Nobbe E., Beck R.	386
Crop Growth Modelling in Mali Based on ERS Scatterometer Information	
Sweeting M., Sun W.	387
Low Cost Small Satellites for Earth Observation and Technology Transfer to Developing Countries	
Torres Rodriguez V., Origel Gutiérrez G.	388
Mapping of Hydrothermal Alteration by Remote Sensing at the Acoculco Caldera, Puebla, Mexico	
Woldai T., Limptlaw D.	395
Issues and Approaches in Mapping the Impacts of Mining on the Environment in Africa (With Test Case From Kitwe Mine, Zambia)	
Zambezi P.	396
Potential for Computer Assisted Distance Learning in Zambia: What are the Constraints and the way Forward	
Appendix: Authors and Co-authors Index	397