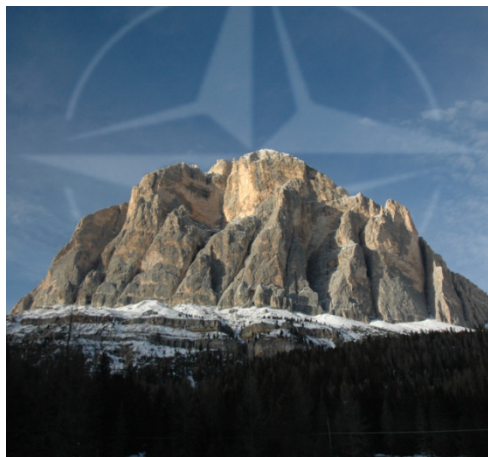


# Geographical Information Processing and Visual Analytics for Environmental Security

NATO - ADVANCED RESEARCH WORKSHOP  
13-17 October 2008 Trento - Italy



Organized by



Fondazione Graphitech - Trento



University of Montenegro

Sponsored by



Geoinfolab



TELESPAZIO  
A Finmeccanica / Thales Company

## DAY 1: 13 October

Program of the Event

- 08.30-09.30 *Registration*
- 09.30-10.00 Raffaele De Amicis and Giuseppe Conti, Fondazione Graphitech (Italy), Radovan Stojanovic, University of Montenegro (Montenegro)  
*Welcome and Introduction*
- 10.00-10.40 Mauro Salvemini, EUROGI (Portugal)  
The Role of GI Associations for the Protection of the Environment
- 10.40-11.00 *Coffee Break*
- 11.00-11.40 Christine Giger, ETH - Swiss Federal Institute of Technology Zurich (Switzerland)  
Model-driven Approach Towards the Harmonization of Environmental Information
- 11.40-12.20 Martin Ford, Commission for Geographic Information – UNINFO (Italy)  
The Importance of GI Standards to Harmonize Environmental Data
- 12.20-13.20 *Lunch*
- 13.20-14.00 Pavel Vanis, VÚGTK - Research Institute of Geodesy, Topography and Cartography (Czech Rep)  
Data Access for Environment Protection and Economic Development - the Experience of Czech Republic
- 14.00-14.40 Marco Panebianco, Lombardia Informatica S.p.A. (Italy)  
Regione Lombardia SDI is Getting INSPIREd: a Technological Perspective
- 14.40-15.20 Giacomo Martirano, EPSILON Italia srl (Italy)  
The Challenge of a Spatial Data Infrastructure for the Mediterranean Islands
- 15.20-15.40 *Coffee Break*
- 15.40-16.20 Oscar Custers, Bentley (Netherlands)  
Advancing GIS for Infrastructure
- 16.20-17.00 Uwe Jasnoch, Intergraph GmbH (Germany)  
Show Cases for Sdi Technology: the Heart of Sustainable Systems in Action
- 17.00-18.00 Roundtable
- 18.00-20.00 *Guided tour of "Castello del Buonconsiglio"*
- 20.00 *Dinner – Restaurant "la Cantinota"*

## DAY 2: 14 October

Program of the Event

- 09.00-09.10 Giuseppe Conti, Fondazione Graphitech (Italy)  
Introduction
- 09.10-09.50 Marc Bonazountas, Epsilon International (Greece)  
Grid Gis Technology for Floods and Forest Fires Emergency Management
- 09.50-10.30 Anastasios Koumoutsakos, TerraMentor e.e.i.g. (Greece)  
Investigation Processes at the Kato Souli Basin
- 10.30-10.50 *Coffee Break*
- 10.50-11.30 Mohamed Hafedh Hamza, Université de Tunis El Manar, (Tunisie)  
Validity of the Vulnerability Methods DRASTIC and SI Applied by GIS Technique to the Study of Diffuse Agricultural Pollution in a Phreatic Aquifer of a Semi-Arid Region
- 11.30-12.10 Al Adailleh Haithem, Karak Governorate Directorate for Environment (Jordan)  
Applicaztion of remote Sensing and GIS in Land Use/Cover Classification and Changes Detection
- 12.10-13.10 *Lunch*
- 13.10-13.50 Pier Giorgio Marchetti, European Space Agency – ESRIN (Italy)  
Exploiting Earth Observation Missions: Opportunities And Issues In Ground Segment Interfaces Harmonisation
- 13.50-14.30 Nazzareno Straccia, Telespazio SPA (Italy)  
Cosmo/SkyMed to support MGCP mapping
- 14.30-15.10 Volodymyr Lukin, National Aerospace University (Ukraine)  
Processing of Multichannel RS Data for Environment Monitoring
- 15.10-15.30 *Coffee Break*
- 15.30-16.10 Paul Dan Cristea University Politehnica of Bucharest (Romania)  
Application of Neural Networks in Image Processing and Visualization
- 16.10-16.50 Igor Djurovic, University of Montenegro (Montenegro)  
Time Frequency Analysis for SAR and ISAR Imaging
- 16.50-17.30 Roundtable
- 18.30 *Bus Transfer to La-Vis wine house and dinner*

### DAY 3: 15 October

Program of the Event

09.00-09.10	Raffaele De Amicis, Fondazione Graphitech (Italy ) Introduction
09.10-09.55	Jim Thomas, National Visualization and Analytics Center Pacific Northwest National Laboratory Computational and Information Sciences Directorate (USA) The Research and Development Agenda for Visual Analytics
09.55-10.40	Knut Manske, SAP AG (Germany) SOKNOS - An Interactive Visua Emergency Management Framework
10.40-11.00	<i>Coffee Break</i>
11.00-11.45	Jörn Kohlhammer, Fraunhofer IGD (Germany) Visual Analytics for the Strategic Decision Making Process
11.45-12.30	Budhendra Bhaduri, Geographic Information Science & Technology Group Spatio-Temporal Visualization for Environmental Decision Support
12.30-13.30	<i>Lunch</i>
13.30-14.15	Hanan Samet, Center for Automation Research Institute for Advanced Computer Studies Sorting Spatial Data By Spatial Occupancy
14.15-15.00	Arno Scharl, MODUL University Vienna -Department of New Media Technology (Austria) Exploring Environmental News via Geospatial Interfaces and Virtual Globes
15.00-15.45	Jorge Posada, VICOMTech (Spain) Visual Processing of Geographic and Environmental Information in the Basque Country: Two Case Studies
15.45-16.05	<i>Coffee Break</i>
16.05-16.50	Patrick Hogan, NASA Ames Research Center (USA) and James Kornell, U.S. Department of Energy (DOE) - National Nuclear Security Administration (USA) Nasa World Wind Advanced Interactive Visualization and Analysis
16.50-18.00	Roundtable
19.00-20.00	<i>Walking tour of the city centre</i>
20.00	<i>Dinner – Restaurant “Due Mori”</i>

### DAY 4: 16 October

Program of the Event

09.00-09.10	Raffaele De Amicis, Fondazione Graphitech (Italy ) Introduction
09.10-10.00	Jose Encarnaç�o, INI-GraphicsNet (Germany) Ambient Mobility Technology for the Human Interaction with the Environment
10.10-10.50	Ido A Iurgel, CCG - Centro de Computa�o Gr�fica (Portugal) Advanced Clustering Analysis for Environmental Indicators
10.50-11.10	<i>Coffee Break</i>
11.10-12.00	P�re Brunet, Universitat Polit�cnica de Catalunya (Spain) Dynamic Terrains: Cities and Real-Time Video on Gigantic Terrain Models
12.00-12.50	Yerach Doytsher, The Abel Wolman Chair in Civil Engineering Dean, Faculty of Architecture and Town Planning Technion - Israel Institute of Technology (Israel) Digital Terrain Models: a Tool for Establishing Reliable and Qualitative Environmental Control Processes
12.50-13.50	<i>Lunch</i>
13.50-14.30	Jan Ochodnický, Armed forces academy of gen M.R. Stefanik (Slovak Rep) Data Filtering and Data Fusion in Remote Sensing Systems
14.30-15.10	Dragana Dordevic, IChTM Centre of Chemistry, University of Belgrade (Serbia) Data Processing for Heavy Metals Accumulation in Urban Areas
15.10-15.50	Nico Pals, TNO Information and Communication Technology (Netherlands) Remote and In-Situ Sensing for Dike Monitoring: the Ijkdijk Experience
15.50-16.10	<i>Coffee Break</i>
16.10-16.50	Andrea Deiana, GeoInfoLab (Italy) SlylineGlobe: 3D Web GIS Solutions for Environmental Security and Crisis Management
16.50-18.00	Roundtable
19.00	<i>Bus Transfer and Dinner – Restaurant “Malga Brigolina”</i>

### DAY 5: 17 October

Program of the Event

09.00-09.10	Radovan Stojanovic, University of Montenegro (Montenegro) Introduction
09.10-10.00	John Black, Public Safety & National Security Technology Strategist, Microsoft Corporation Application of Virtual Worlds to Environmental Security
10.00-10.50	Aleksandar Nospal, University "Ss. Cyril and Methodius" Environmental Protection and Industry: Parameters Necessary for Environmentally Related Decision Making
10.50-11.40	Wolfgang Kienreich, Know-Center (Austria) Shaping Opinions: Visual Analysis of Public Discourse on Environmental Issues
11.40-12.00	<i>Coffee Break</i>
12.00-12.50	Guillermo Villa, IGN - National Geographic Institute (Spain) Cooperative Decentralization: a New Way to Build an Added Value Chain with Shared Multiresolution Satellite and Aerial Imagery and Geoinformation
12.50-13.50	<i>Lunch</i>
13.50-14.30	Vladimir Krivilev, Academy of Geopolitical Problems (Russian Federation) Geopolitics and Environmental Security
14.30-15.10	Doron Elhanani, EMESCO (Israel) Environmental Terrorism vs Environmental Protection
15.10-15.50	Massimo Contri, Comando Carabinieri Tutela Ambiente di Roma (Italy) Carabinieri Environmental Care Command: Illegal Trafficking of Waste in the Light of National and European Legislation
15.50-16.10	<i>Coffee Break</i>
16.10-17.20	Roundtable
17.20-18.00	Raffaele De Amicis & Giuseppe Conti, Fondazione Graphitech (Italy), Radovan Stojanovic, University of Montenegro (Montenegro) <i>Closing of the ARW</i>
19.30-20.00	<i>Guided tour of SASS</i>
20.00	<i>Dinner – Restaurant “GreenTower”</i>