

Joint Symposium ICA working group on CEW and JBGIS Gi4DM Cartography and Geoinformatics for Early Warning and Emergency Management

January, 19-22, 2009, Prague Czech Republic





INTERNATIONAL CONFERENCE ON CARTOGRAPHY AND GIS January, 21-24, 2008



Rila is the highest mountain in Bulgaria and Balkan Peninsula (Moussala peak – 2925 m).





Only 70 km from Sofia is a beautiful mountain ski resort – Borovets, situated at 1350 m above sea level on the northern slopes of Rila Mountain.



#### www.datamap-bg.com/conference2008

INTERNATIONAL CONFERENCE ON CARIOGRAPHY AND GIS January, 21-24, 2008

GIS Technologies and related disciplines Cartography and GIS in Education Early warning and crises management Internet cartography and Electronic Atlases Planetary cartography Map design and production Cartographic visualization GIS for city traffic GPS Technologies Remote sensing technologies Gender projects





www.datamap-bg.com/conference2008



Gi4DM: Series Symposia across the continents









India, 2006: 60 Participants from 12 Countries

Canada, 2007: 241 Participants from 33 Countries

China, 2008: 141 Participants from 13 Countries







#### Toronto, 2007 Yukon Territory Northwest Territories Newfoundland and Labrador Nunavut British Columbia Alberta Manitoba Quebec Prince Edward Island Ontario Nova Scotia New Brunswick



### Harbin, 2008



#### Books



#### 2005

Peter van Ooslerom Siyka Zlatanova Elfriede M. Fendel seten

#### Geo-information for Disaster Management

#### 2007



Jonathan LI - Sisi Ziatanova Andrea Fabbri (Eds.) Geomatics Solutions for Disaster Management

Springer

#### 2008



Geospatial Information Technology for Emergency Response

Edited by Disi 22stances and Joseffran Li

Carlos La francia

#### 2008

ENVIRONMENTAL SCIENCE AND ENGINEERING

Shailesh Nayak - Skit Zlatanova (Eds.) Remote Sensing and GIS Technologies for Monitoring and Prediction of Disasters

2 Springer







# **After ISPRS congress in Beijing**

- Gi4DM is coordinated by the Joint Board of the Geoinformation societies
- Ad-Hoc committee on Risk and disaster management
  - To coordinate activities and research
  - To link researchers from geo-societies
  - To help in building political and social awareness of importance of geo-information
  - Document on Best Practice







## Joint conference ICA, ISPRS









### **Some facts**

- 145 Participants
- 34 Countries
- 8 keynotes
- 18 oral sessions
- 1 poster session
- 3 sponsor presentations
- Meeting JB GIS Ad-hoc group Crisis and Risk Management
- Round table
- Meeting of ICA Com. On Education and Training
- Meeting of ICA Com. On Cartography and Children





### **Findings: motivation**



- Increased frequency of natural disasters
- Increased anomalies
- Global warming
- Increased humanitarian disasters
- Man-made disasters (terrorism)
  - Not that much discussed about industrial disasters







# **Technology keeps improving...**

- Access to data is improved
- Good web-based systems (geo-portals) are increasing
- Open source solutions are tested at many places
- Many open standards
- New types of virtual environments
- Serious games !





## **Still needed**



- Building SDI at national and international level
- Central and East Europe, Asia, Central and South America should be involved n standardization initiatives
- Awareness about th quality of model (not only quality of data)
- 3D ? (not that much discussed)
- Sensor web
- Semantic web/ ontology (communication between different domains)
- User-oriented applications! (knowledge-based)









#### **Contacts with users are better...**

- Tests with real users (prototypes tested immediately after disaster)
- Projects with end-users (also evident from recently funded EC projects)
- Projects for systems in developing countries





#### Still much to do...



- The politicians have to be aware of the need for these developments ('research is done for social benefit')
- Geo-spatial strategies and policies
- Society needs to accept the spatial component -'spatially enabled' society
- Building 'trust' in use of technology
  - Did not discuss much how: best practice, demonstrators, psychologists, usability tests....





## **Presentation of data is overlooked** (cartography)



- Better systems of symbols
- Better visualisation according to user profile needs
- Convincing simulations
- Visual analytics
- Interaction with visualised data
- Maps for children. Why not for users with different backgrounds?
- Adaptive and context cartography!!
- 'when the map is drawn it is already reality'





## What was said in 2005:



'they what to sell us GIS' 'GIS is a tool, it does not solve everything by itself' 'there is difference between 'small' disasters and 'big' disasters' 'we have to educate disaster managers' 'geo-ICT has to learn from disasters' 'technologically everything is possible' 'the problem is organization and communication between partners' 'we succeeded because we are working together' 'our geo-information dates 1973' 'response phase cannot be isolated from prevention' 'data integration should be based on ontology and semantics' 'data are available after 3 days' vs. 'data were available after 3 hours' 'we have to stay close to the users' 'not all the people can work with total station but everybody can measure with steal type' 'can it be extended in 3D?'

'I have learned a lot'











#### Gi<sup>4</sup> DM

#### **Next steps**

- Cartography for CEE, February 14th, Vienna
- ICC Chile, November 2009
- 6<sup>th</sup> Gi4DM, Torino, Italy, February 2010
- 3<sup>rd</sup> ...., Bulgaria
- Springer Book (by June)
  - Selection of 30 papers (you will be notified in two weeks)
  - Send to 2 reviewers (by end of February)
  - Changes and re-submission (by end of March)







#### **Special Thanks**

all the organisers sponsors keynote speakers presenters attendees LGC, Brno





