ISPRS Workshop
WG II/5, II/6, IV/1 and IV/2 Joint Workshop on
"Spatial, Temporal and Multi-Dimensional Data Modelling and Analysis"
October, 2-3, 2003
Québec, CANADA

WORKSHOP PROGRAM
PLAZA HOTEL, RAVEL ROOM

THURSDAY, OCTOBER 2ND

8.30 Registration
9.00 Welcome Word

9.15 - 10.15	SESSION 1	SPATIAL DECISION SUPPORT SYSTEM

Prototyping a GIS-based Spatial Decision Support System in a Manufacturing Environment
S. Gao, J. Li (Ryerson University, Canada)

Application of GIS in an Advanced Transportation Management System
X. Sun, J. Li (Ryerson University, Canada)

10.15 – 10.45 COFFEE BREAK

10.45 – 12.15	SESSION 2	SPATIO-TEMPORAL GEOGRAPHIC INFORMATION SYSTEMS

A Spatio-Temporal Query Interface for Analysing Individual Biographies : Report On A Practical Experience
M. Thériault, C. Claramunt, A.-M. Séguin (Université Laval, Canada)

Beyond the VCR Metaphor: Operations for a Temporal VRGIS
J. Campos, K. Hornsby (University of Maine, USA)

A Spatio-Temporal GIS for Moving Objects on the Globe
M.A. Mostafavi, C. Gold (Université Laval, Canada)

12.15 – 14.00 LUNCH

14.00 – 16.00	SESSION 3	3D GEOGRAPHIC INFORMATION SYSTEMS

3D GIS, Where Are We Standing
J. E. Stoter, S. Zlatanova (Delft University of Technology, The Netherlands)

Accessing a 3D Geo-DBMS Using Web Technology
M.E. de Vries, J.E. Stoter (Delft University of Technology, The Netherlands)

3D Visualization System for High Resolution Satellite Colour Stereo Images
P.Xie, Y. Zhang (University of New Brunswick, Canada)

3D Geological Modeling: Are GIS or CAD Appropriates?
J. Pouliot, B. Lachance, A. Brisebois, O. Rabeau, D. Kirkwood (Université Laval, Canada)

16.00 – 16.20 COFFEE BREAK

16.20 – 17.30	SESSION 4	MULTI-SCALE AND MULTI-MEDIA REPRESENTATION

State of the Art on Spatial Granularity Definition Process
E. Camossi, M. Bertolotto, E. Bertino, G. Guerrini (Universitµa degli Studi di Milano, Italy)

Data Collection and Information Retrieval for SDSS of Disaster Management - Implementation of Multi-media Data Management Functions
W. Lu, S. Mannen, M. Sakamoto, T. Doihara (Asia Air Survey, Japan)

19.00 DINNER IN THE OLD QUEBEC (AT THE PARTICIPANTS' EXPENSES)
We'll meet at 18.30 in the hotel lobby

FRIDAY, OCTOBER 3RD

9.00 – 10.30	SESSION 5	MULTI-DIMENSIONAL DATABASE SYSTEMS

SOLAP: A New Type of User Interface to Support Spatio-Temporal Multidimensional Data Exploration and Analysis

S. Rivest, Y. Bédard, M.J. Proulx, M. Nadeau (Université Laval, Canada)

Implementation and Evaluation of a Hypercube-based Method for Spatio-Temporal Exploration and Analysis

P. Marchand, A. Brisebois, Y. Bédard, G. Edwards (Université Laval, Canada)

Developing a Web-based Multidimensional and Dynamic Watershed Simulation and Visualization System : Framework Design and Preliminary Results

H. Dong, J. Li (Ryerson University, Canada)

10.30 – 10.50 COFFEE BREAK

10.50 – 12.00	SESSION 6	SPATIO-TEMPORAL DATA MODELLING

Polygons : The Unstable Foundation of Spatial Modeling

P. van Oosterom, W. Quak, T. Tijssen (Delft University of Technology, The Netherlands)

Modelling Spatio-Temporal Databases with Extended UML

Y. Bédard, M.-J. Proulx, M. Nadeau (Université Laval)

12.00 – 13.30 Lunch

13.30 – 15.00	SESSION 7	Populating Spatial, Temporal and Multi-Dimensional Databases

Semi-Automated Road Extraction from QuickBird Imagery

R. Wang, Y. Zhang (University of New Brunswick, Canada)

Extraction of Urban Road Network Using QuickBird Pan-Sharpened Multispectral and Panchromatic Imagery by Performing Edge-Aided Post-Classification

R. Wang, Y. Zhang (University of New Brunswick, Canada)

A New Perspective On Trajectory Compression Techniques

N. Meratnia, R.A. de By (University of Twente, The Netherlands)

15.00 – 15.30 COFFEE BREAK

15.30 – 17.00	SPECIAL SESSION – DEMOS

Demos from interested participants

17.00 – 19.00 COCKTAIL (PLAZA HOTEL)

SATURDAY, OCTOBER 4TH

Want to see the beautiful Fall colours of Canada?

We invite you to discover the beauty of nature in Quebec by taking advantage of a tour in a friendly atmosphere of the coloured montains surrounding Quebec City. For those who desire, short-distance hiking trails in the coloured forest is planned at Station Touristique Duchesnay, a high-quality resort infrastructures and a magnificent setting, whatever the season.

Come and admire the beautiful fall colours!

It's free!!!

You only need to register by sending an email to: Eveline.bernier@scg.ulaval.ca before September 24th.

(We must be at least 15 participants, bring your boots and your raincoat)

STATION TOURISTIQUE DUCHESNAY

Natural environment

The wooded area covers an 89-km² territory. It is typical of the Laurentian forest as evidenced by the dominant presence of maple and yellow birch. The maple forest is a major point of interest, due not only to the diversity of spring flowers but also to the fall colours.

Geology

The continental glacial retreat left behind till deposits and various morphologies associated with the glacial era. Champlain Sea is thought to have covered the southern part of Duchesnay, namely the part associated with the St. Lawrence Lowlands up to an altitude of 224 metres, with only the hill peaks being visible. The glacial deposits present on the site come for the most part from the scarring and abrasion of the rock substrate. This substrate is made up of igneous and metamorphic rocks of Precambrian origin where granite and gneiss dominate. Numerous erratic blocks dot the forest, forming rock shelters.

Vegetation

The maple forest dominates a large part of the territory. Other stands occupy smaller areas. The presence of peatlands, 1.8 km from the building complex, represents a very rich environment in terms of plants and birds. Yellow birch, larch, sugar maple, white spruce, red maple, black spruce, beech, balsam fir and black ash are the main species found in the forest

Terrestrial wildlife

This territory is home to a few winter yards of white-tailed deer and moose. The other characteristic animal species include the black bear, porcupine, coyote, mink, red fox, river otter, beaver, fisher, muskrat and ruffed grouse.

Winged wildlife

Over the years more than one hundred species of birds have been surveyed on the territory of the resort, but as there are close to 200 varieties in the surrounding areas, visitors may occasionally encounter other species.