

# **International Workshop on Virtual Changing Globe for Visualisation and Analysis**

(VCGVA 2009)  
October 27-28, 2009  
Wuhan, China

## **Purpose and Scope**

The term virtual globe is being used frequently to refer to a virtual and digital global environment enabled by advanced information technologies. It is capable of letting users freely fly anywhere on a virtual Earth, with different views of Earth such as satellite imagery, geographical features, terrain, 3D buildings, and advanced stars, atmosphere or sunlight effects. More specifically, it allows users to fuse heterogeneous geospatial data from multiple sources, conduct network-based local-to-global multi-resolution visualization, and share data with others. The wide popularity of virtual globe software such as Google Earth, Microsoft Virtual Earth, NASA World Wind and EarthBrowser in the geospatial and general communities inspires more ways of exploring and using virtual globes. Context-aware visualization and analysis is a particularly important part of these activities, as it can continuously fit the current user's situation or operating environment. When combined with 2D and 3D geospatial Web services, virtual globes can support data analysis, information extraction and even knowledge discovery. Processing of multi-temporal images and change detection has been an active research and application field in remote sensing for decades. The wider availability of large archives of historical images at a global scale makes it also possible for long-term change detection and modeling in a virtual globe platform.

VCGVA 2009 aims at providing a timely forum for the exchange of state-of-the-art research results in the areas of virtual globes, context-aware visualisation/analysis and change detection and process modelling. This workshop will bring together researchers to address such issues as:

- Assessment of remote sensing data for generating and visualizing landscape and models
- Database generation for digital topographic and thematic mapping (including orthoimages and digital terrain models)
- Integration of multi-source and multi-scale data in local and regional landscape modelling and visualization applications
- Analysis of characteristics of multi-temporal data for extraction of attribute information
- Methodologies of computer assisted interpretation and analysis of multi-temporal data
- Temporal pattern recognition and time series analysis and modeling
- Methodologies for global monitoring, modeling and prediction
- Methodologies for extracting essential climate variables from long-term satellite observations
- Application and assessment of advanced visualization, virtual reality and multimedia methods for 2-D, 3-D and 4- D mapping tasks in stand-alone, mobile or web-based environments
- Use of virtual globes for geospatial data integration, visualization and analysis
- Assessment of context-aware visualization and analysis of image data and geodatabases

## **Paper Submissions**

Full papers should be prepared according to the Guidelines for Authors Preparing Manuscripts for ISPRS Sponsored Meeting (<http://www.isprs.org/documents/orangebook/app5.html>). Authors are requested to follow the Manual for Presentation of Technical Papers at ISPRS Congress and Symposium (<http://www.isprs.org/documents/orangebook/app6.html>). Please indicate the special topic that your paper addresses at the end of your abstract.

Please submit your abstract and full paper via email to Dr. Peng Yue 、 Dr. Haigang Sui.or Ms.Shi Lite

## Important Dates

~~Abstracts submission: 31 July~~

Papers submission: 28 July

~~Papers submission: 08 August~~

Notification of acceptance: 28 August

Submission of camera-ready papers: 18 September

Workshop: October 27-28, 2009

## Keynote Speakers



Deren Li, Academician, Wuhan University



John Townshend, University of Maryland at College Park, USA



Vincent Tao, Microsoft Virtual Earth



Patrick Hogan, NASA Ames Research Center, USA

## Organizing Committee

International Society for Photogrammetry and Remote Sensing Working Group IV/4 (ISPRS WG IV/4)

International Society for Photogrammetry and Remote Sensing Working Group VII/5 (ISPRS WG VII/5)

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, China

## Workshop Chairs

Jianya Gong, Wuhan University, China

Qiming Zhou, Hong Kong Baptist University, China

## Program Committee Members

Marguerite Madden, University of Georgia, USA

Hujun Bao, Zhejiang University, China

Geoffrey J. Hay, University of Calgary, Canada

Maged N Kamel Boulos, University of Plymouth, UK

Jean-Francois Crétaux, LEGOS, France

Georg Bareth, University of Cologne, Germany

Haigang Sui, Wuhan University, China

Peng Yue, Wuhan University, China