ISPRS Test Project on Urban Classification and 3D Building Reconstruction

ISPRS - Commission III - Photogrammetric Computer Vision and Image Analysis
Working Group III / 4 - Complex scene analysis and 3D reconstruction, 2008-2012
http://www.itc.nl/ISPRS_WGIII4/tests_datasets.html

Invitation

ISPRS Commission III would like to welcome participants to the ISPRS Test Project on Urban Classification and 3D Building Reconstruction. This project has been designed to provide our scientific community with state-of-the-art airborne remote sensing data to enable independent benchmark tests of automatic object extraction techniques. We look forward to your valuable contribution!

Project Objectives

- To provide reference state-of-the-art airborne image and LiDAR data sets which can be used by all researchers interested in urban object classification and building reconstruction.
- To enable researchers to test and validate own methods and algorithms on common data sets.
- To numerically assess the results and to publish them on the ISPRS congress.

Object Classes

Two test sites, each containing several test areas for which reference data are available, are provided for the participants in this project in order to evaluate techniques for the extraction of various urban object classes:

- **Urban object detection:** The participants shall carry out object detection such as buildings, roads, trees, artificial ground, natural ground, and cars. Reference data are available for a variety of object classes.
- **3D Building Reconstruction:** The participants shall reconstruct detailed 3D roof structures in the test areas. Detailed 3D models of roofs are available as reference data. They will be used to evaluate the quality of the roof plane segmentation process as well as the geometrical accuracy of the outline polygons of the roof planes.
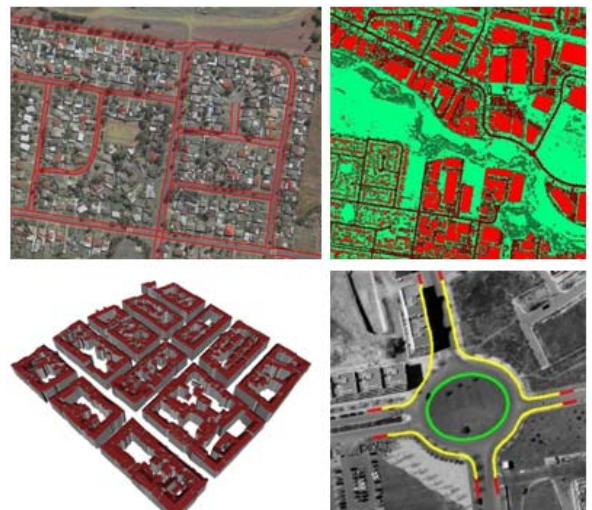
Dataset

- **Vaihingen/Enz, Germany:** This test data consists of three test areas for which reference data for various object classes are available and a larger test site "Roads" for road extraction.

- **Toronto, Canada:** The data contains representative scene characteristics of modern mega city in the North America including a mixture of low- and high-story buildings with a wide variety of rooftop structures and street and road features.

Important Information and Dates

Date	Important Information
30 September 2011	Deadline for submitting results by the participants
30 October 2011	Participants are informed about the evaluation of their results
28 November 2011	Deadline for submitting full papers for the peer-reviewed track of ISPRS Commission III at the ISPRS Congress in Melbourne
31 May 2012	Final deadline for submitting results by the participants (for journal paper)
30 June 2012	Participants are informed about the evaluation of their results
24 August 2012 – 3 September 2012	ISPRS Congress in Melbourne
30 September 2012	Submission of journal papers about the test results
2013	Special issue of a photogrammetric journal on the test project

Contact

For further information, contact any of the officials of ISPRS WG III/4

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You can also visit the WG web site: http://www.commission3.isprs.org/wg4/

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