

Geoinformation by Oblique aerial images

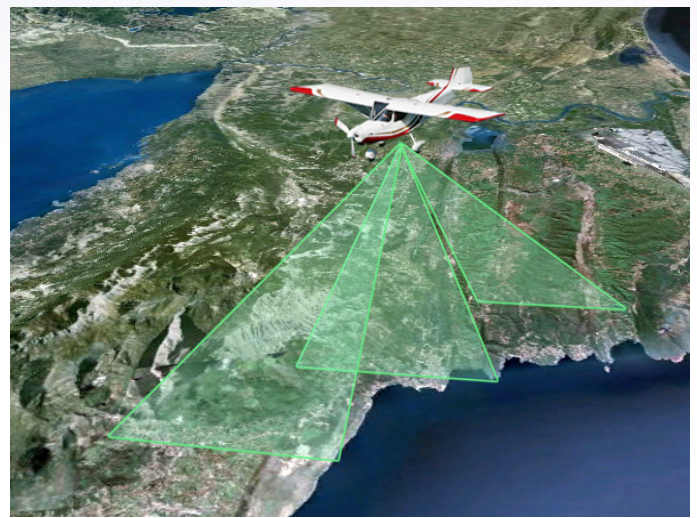
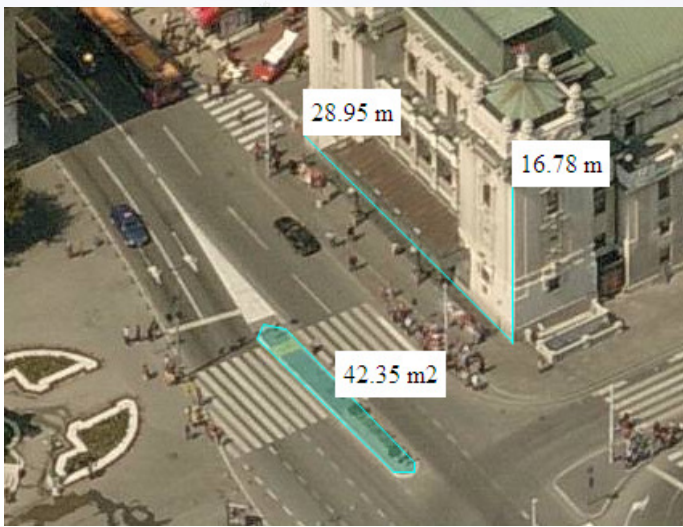
THE IDEA

- **fast and affordable method** for updating spatial data bases
- system **easy for use** by wide spectrum of users. Training of clients who never used aerial images lasts only one day.
- 3D environment with **possibility for measurement of distances, heights, and object area**
- Very detailed presentation of structures with possibility to view different sides of fasades and recording the number of flors

HOW?

Oblique images are collected using cameras with several sensors. Our system provides one vertical and four oblique images with vertical angle of 45 degrees. Oblique images are oriented towards East, West, North and South.

Using our new camera system, we are able to provide images with much higher resolution and positional accuracy than ever before.



SOFTWARE SUPPORT

Oblique images can be used with desktop software that we can deliver with images.

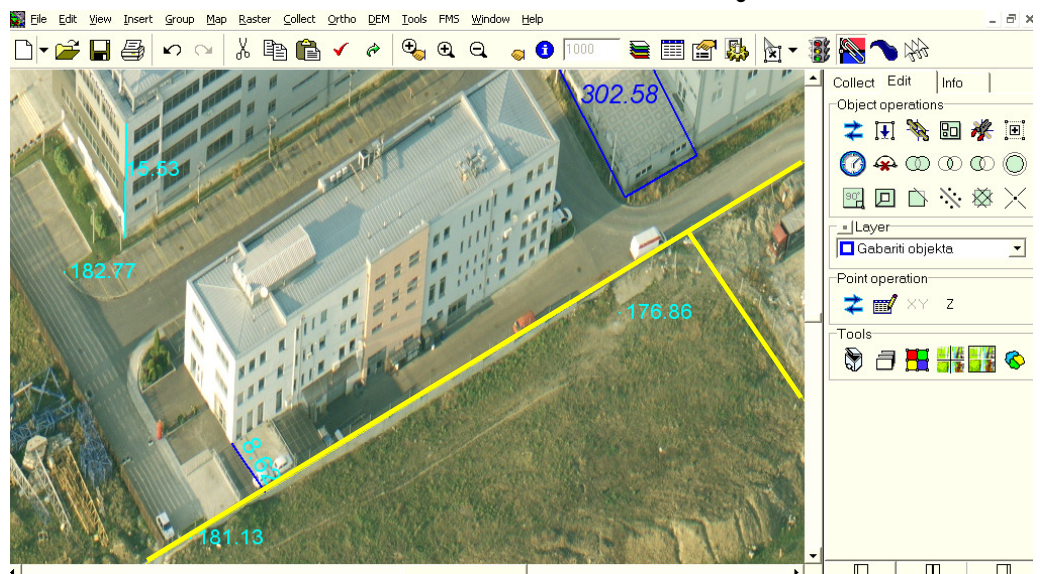
Software can be used for browsing and measurement on images and for integration of your existing spatial GIS or CAD data.

USE OF OBLIQUE IMAGES

- detection of structures without building permit,
- better collection of spatial data about structures for taxation,
- risk management (police, fire brigades, ambulances, military ...)
- for comunal inspection
- urban planning
- cadastre

Position and attitude is determined for each image. Digital terrain model (DTM) is delivered with images. Databases with images and DTM can be used for:

- 3D coordinate measurement,
- Area measurement,
- Measurement of distances and height of structures



Location: Belgrade, image from November, 2011. resolution 6cm



3D CITY MODELS

3D City models are widely used in last several years. New computers and software platforms enable much more detailed and accurate presentation of structures in 3D. Our group has significant experience in developing 3D City models with different level of details and approximation, depending on user requirements:

- 3D models of structures without textures,
- 3D models of structures with textures on the roofs,
- 3D models of structures with artificial textures created from standard patterns,
- 3D models with textures created from real images

Depending on client requirements, models can be developed using different data sources. Based on photogrammetric images, LIDAR data, from oblique images, or by combination of these data sources. Application of oblique images has created new opportunities for integration of real textures of structures in 3D models.



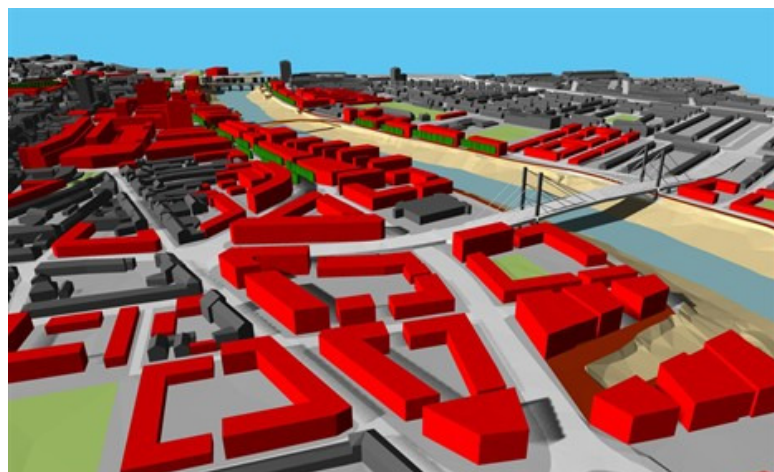
3D City models can be prepared as films based on planned flight above specific city area, or as complex 3D vector models prepared for browsing and manipulation by the client.

AEROPHOTOGRAMMETRIC STEREO MODELS

We have available stereo models for 3D plotting. Older images have resolution of 20 cm and 30cm. New images of urban areas are collected with 5cm to 10cm.

If you are interested, contact us and we will provide complete solution for you, including 3D stereo glasses, workstation, software and stereo images that you can use for your specific purposes.

Import and eksport of data is provided in all standard GIS and CAD software tools.



3D City models can be used for:

- Engineering and design
- Environment modelling
- Real estate market
- Risk management
- Urban planning and telecommunication
- Tourism

SOFTWARE AND HARDWARE FOR 3D MODELLING

We provide complete CAD and GIS solutions for our clients with affordable pricing. For further information, please contact our sales department in order to get the latest information related to software and hardware platforms.

We can offer complete 3D graphic workstation, ready for the most demanding projects.

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