



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

FOURTH HYDAP WORKSHOP

Laser scanning

Brno University of Technology, faculty of civil engineering, institute of geodesy
20 – 22th November, 2013

Dear partners,

let us invite you to the fourth HyDaP Workshop. The workshop will be held at institute of geodesy in University of Technology, faculty of civil engineering (Brno, Veveří 95, see the [map](#)).

The lectures and practical training will be pointed on Airborne and terrestrial laser scanning. The Workshop will be held in Czech language, the presentation in English.

If interested, please register via the [Doodle](#) system.

Any additional requirements for accommodation please send to Ing. Pavla Glocová: glocova.p@czechglobe.cz.

Please, in requirements for accommodation specify whether you are not bothered with modest accommodation, or with whom you are willing to share a room.

Please, register before **15th November, 2013**.

The expenses on accommodation and refreshment during the workshop will be covered by the CVGZ.

We are looking forward to meeting you.

On behalf on organization committee
Vlastimil Hanzl

Program

20th November (10:00 – 16:30)

Theoretical introduction to airborne laser scanning (laser light, scanning principle, the basic concepts and scanner parameters, factors affecting accuracy)

Technical principles, various technologies of lidar scanning, comparing of device manufacturers in terms of technical solutions, physical aspects, advantages and disadvantages. Suitability of technologies for various applications.

The principles of flight planning, influence of weather and terrain configuration, practical experience of commercial projects. Theoretical introduction to terrestrial laser scanning (scanning principle, the basic concepts and scanner parameters, factors affecting accuracy), practical demonstration terrestrial scanner.

21st November (8:30 – 17:00)

Data processing, processing technology, the practical part.

Use in forestry, precision generated digital terrain models (DTM) and surface (DSM), calculation of basic characteristics, the use of airborne laser scanning for mapping forest division using a semi-automatic object-oriented image classification. Determination of height, breast-height diameter and volume of timber as individual trees and entire forests.

22nd November (8:30 – 12:30)

Extraction of landscape features from remote sensing data.

Commercial software for processing lidar data for generating terrain models, surface models, data classification in conjunction with others, such as image data.

Range imaging camera.

Recent findings on laser scanning of Intergeo exhibition in Germany.

Discussion - future cooperation on research articles, publications and projects.
Summary and Conclusion