DIGITAL ORTHOPHOTO IMAGES AND 3D TERRAIN MODELS

Company Geoprojekt d.d. owns an unmanned aircraft eBee, manufactured by the Swiss company SenseFly and designed by professors and engineers of the University of Lausanne.

Figure 1: Unmanned Aircraft eBee

This model of unmanned aircraft is equipped with an 5 MP camera and is used for low altitude flights up to the maximum permissible altitude of 300 meters in accordance with the applicable Regulations on civil Unmanned Aircraft Systems. This modern vehicle gives us the possibility of producing high quality orthophotos of better resolution than standard ones kept by the State Geodetic Administration.

Figure 2: Employees of Geoprojekt d.d. Split with the aircraft

Using this type of recording it is possible to cover large areas in a short time, which was not the case so far. Possible products obtained by this kind of recording are digital orthophoto images, 3D terrain models in standardised file formats (.dxf, .obj, .shp, .dwg), 3D point clouds and various other formats according to the clients' requests.

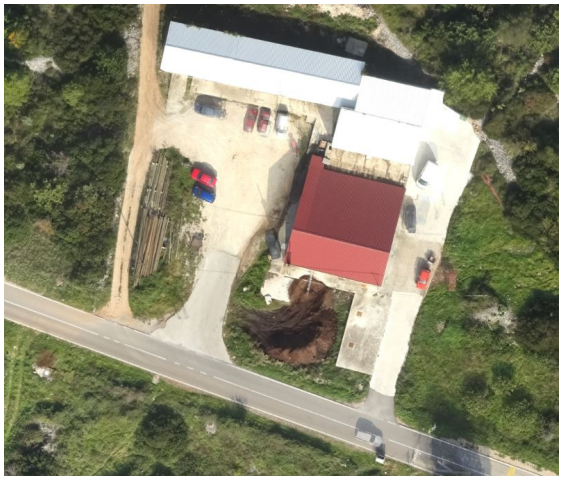

Figure 3: Digital orthophoto image of a location in Grohote on the island of Šolta

Figure 4: Digital 3D terrain model of the Vela Farska cove on the island of Brač

This method of recording is applicable for a wide range of investors' needs.
Application:
- base maps for construction design
- physical planning site plans
- base data for GIS
- base data for thematic maps
- 3D terrain visualisations etc.