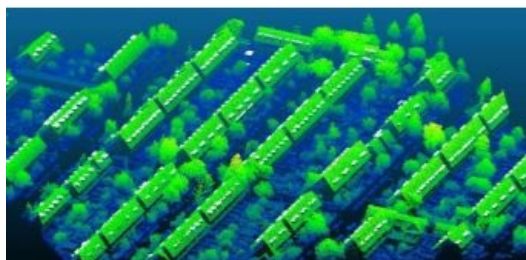# Rotterdam Analyses City Lidar Data with New Technique

From demolished offices and new dormer windows to recently planted trees: municipalities continuously keep an eye on changes in the city in order to optimally organise space. The Municipality of Rotterdam recently analysed â€˜Big 3D Dataâ€™ from airborne Lidar data (elevation dataset) of Rotterdam very quickly using a new technique by the Dutch high-tech start-up GeoSignum.

The municipality is looking for smart ways to collect information, and is even the first one in Europe to have an overview of all the dormers in the city. It is of great importance to have a complete building information, said Michiel Boulhouwer of Urban Management Rotterdam. Not everybody is obliged by law to possess a complete building information (the basis registration of addresses and buildings) for municipal tasks. The information is also necessary for parties such as moving companies, the fire brigade and the tax office.

The building development and plantation has been mapped with the help of airborne Lidar technology for several years already, but the analysis of these big amounts of information took lots of time and was less effective. GeoSignum is an innovative company that has a technological advantage, which makes them able to deliver specified information for a good price, stated Boelhouwer.

Software

Rotterdam's airborne Lidar data is analysed using Geosignum Pointer software. Before, it was a matter of months to extract information from massive size Lidar datasets, now it is only a matter of a couple of weeks or even days, Dogan Altundag, founder of GeoSignum, commented. Datasets can be processed extremely fast, without the need of buying a licence or software pack.

The Municipality of Rotterdam tracked in a couple of weeks almost half a million trees in the city, and was able to precisely find out where recently buildings, dormers or sheds have been built. Through using different colours it is possible to easily identify which changes took place, said Altundag.

The municipality uses the information for policy and management. Roots of trees for example use space cannot be used for pipelines and sewers. Now they have the ability to see for more locations where this different functions collide with each other, Boelhouwer noted. For the first time Rotterdam is in possession of complete and accurate tree information. The municipality is currently exploring what they can do with this new information, for there are numerous possibilities with this technique.

It is now possible to try the [GeoSignum Pointer web-platform](#) (BETA) at no cost.

https://www.gim-international.com/content/news/rotterdam-analyses-city-lidar-data-with-new-technique