

### PRESS RELEASE

# 3D city models: Fraunhofer researchers allow direct access to their technology

3D city or landscape models are a key to civic participation. An enormous volume of data must be processed for this purpose, however. The technology by the researchers of Fraunhofer IGD makes this processing much more efficient. They will show their current developments at this year's INTERGEO in Stuttgart.

(Darmstadt/Rostock/Graz) Whenever a large-scale construction project is pending in a city or municipality, the citizens are legitimately interested in understanding how it might change their lives. 3D models have become increasingly popular in recent years in order to provide information on a project from the very beginning in a comprehensible and comprehensive manner. 3D city models or comparable spatial data, however, can quickly turn into an enormous flood of data. In order to master it, special software, high-performance computers and specifically trained staff are needed. "Various digital information, such as aerial views, construction plans or terrain models are compiled to one overall model in laborious suboperations", explains Michel Krämer from the "Spatial Information Management" competence center of Fraunhofer IGD. "This is a very timeconsuming process, often taking several days in practice".

The GEOToolbox developed by the researchers of Fraunhofer IGD in Darmstadt should now significantly reduce this effort. "As we are faced with such tasks time and again, we have developed some tools to make our lives easier", says Krämer. Fraunhofer IGD has more than two decades of experience in processing large 3D data and a long expertise in 3D spatial information. According to Krämer, the institute thus provides mainly smaller companies in the spatial industry with an opportunity to develop new applications more quickly and thus save costs. PRESS RELEASE August 13, 2015 || Page 1 | 4



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Krämer and his colleagues are not worried about making many competitors this way. "It is Fraunhofer's task to provide the industry with academic basics", says Krämer. "The potential of 3D models in urban planning for citizens and investors must be better exploited. If our GEOToolbox can make a contribution, then everyone benefits and opportunities for further research are created."

The GEOToolbox will be presented together with other developments at this year's INTERGEO in Stuttgart in Hall 6 Booth F6.037 from September 15 through 17.

For more information:

http://www.igd.fraunhofer.de/en/Institut/Abteilungen/Geoinformationsman agement PRESS RELEASE August 13, 2015 || Page 2 | 4



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Image: [M] It is quick and simple to explain even complicated construction projects by means of a 3D model. The processing of the required data flood, however, is anything but easy. The researchers of Fraunhofer IGD intend to change this now with their GEOToolbox. They will show their development at INTERGEO 2015 in Stuttgart from September 15 through 17. (© Fraunhofer IGD)

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### Profile

Fraunhofer IGD is the world's leading institute for applied research in Visual Computing. Visual Computing is image- and model-based information technology and includes computer graphics and computer vision, as well as virtual and augmented reality.

In simple terms, the Fraunhofer researchers in Darmstadt, Rostock, Graz, and Singapore are turning images into information and extracting information from images. In cooperation with its partners, technical solutions and market-relevant products are created.

Prototypes and integrated solutions are developed in accordance with customized requirements. In doing so, Fraunhofer IGD places users at the forefront, providing them with technical solutions to facilitate computer work and make it more efficient.

Owing to its numerous innovations, Fraunhofer IGD raises man-machine interaction to a new level. Man is able to work in a more result-oriented and effective way by means of the computer and visual-computing developments. Fraunhofer IGD has more than 200 employees and budget amounts over 19 million euros.

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