

THE TREND: NO-TOUCH TECHNIQUES

Intergeo 2010



Arriving in Germany's fourth largest city a whole day ahead of the Intergeo opening gave me time to visit the famous Cologne Cathedral. Construction of this magnificent building began in 1248 and took, including interruptions, until 1880; 144 metres in length and 86 metres wide, with towers reaching 157 metres in height, it makes for a pretty impressive sight. While I was playing tourist, Intergeo was being set up on the other bank of the Rhine. With just hours to go before the opening, it makes one seriously wonder how all the stands will be ready in time (Figure 1). But when it came to it, over 17,500 visitors passed through the gates of the Cologne conference and exhibition centre to visit the Intergeo between 5th and 7th October 2010, and both exhibition space and visitor numbers just go on growing. This year a total of more than five hundred exhibitors representing 32 countries demonstrated their products. A novelty was "China Town" (Figure 2), a joint presentation by Chinese companies. Some French companies also joined forces to present themselves in a cluster, and the Open Source community followed suit, all showing together in one area.

No touch

Visiting the trade fair could easily give the impression of surveyors being banned from the public space. Given the traffic and crowds in densely populated areas of the world, it looks as if it's becoming more and more impossible to actually place a tripod carrying an instrument in the middle of the road and a prism pole on the object to be mapped. Many exhibitors offered solutions for mapping and gathering information without annoying pedestrians or causing traffic jams by blocking the road. The number of mobile mapping systems on offer is still increasing, and the combination of systems mounted on a roof rack becoming more and more flexible: from just one camera to several, combined with GNSS receivers, Lidar systems, video-registration equipment etc. In fact, it's beginning to look like a competition for whom can get the most instruments to perch on a roof rack (Figure 3). Several vehicles used for mobile mapping purposes were demonstrated to visitors in

the open area of the exhibition space.

Photogrammetry

Gathering information using photogrammetry is also increasing in popularity. Besides the well-known manned aircraft equipped with big, very high-resolution cameras like Intergraph's DMC-II, launched in Europe during this show, a wide variety of unmanned aircraft were also on display (Figure 4). Radio-controlled helicopters and quad-copters (Figure 5) flew over the stands carrying small cameras. I'm not sure how reliable this is as photogrammetry per se, but it could be very useful for gathering all kinds of information.

Survey instruments

As in previous years, an increasing number of (mainly Asian) manufacturers showed a wide variety of survey instruments and accessories. Leica introduced the Viva TS 15, an imaging total-station. A few years ago I spotted a Topcon imaging total-station and I was very enthusiast about it; finally it's found a successor. GNSS systems were on view all over the exhibition floor. Javad showed its GNSS receiver Triumph-VS, an instrument that not only analyses and shows interference but also has an In-Band Interference Rejection option that removes the same (Figure 6). Several suppliers demonstrated PDAs, from very small to almost laptop size, rugged, and some with

built-in GNSS receivers or, like the ProMark 200 from Ashtech, to be used as a PDA or as RTK rover. In short, mapping goes mobile.

Multi-source software

There were countless displays; several applications were demonstrated to show visualisation of data in 2D or 3D. There were combinations of different sources... everything seems possible. It's hard to judge how effective all these applications are; demonstrations using a limited volume of data are quite different from working with the enormous amount gathered in a single day driving around with a mobile mapping system. Special attention was given to all kinds of open-source software applications, with several companies accumulated in the OSGeopark. This software seems to be proving more and more popular among geo/gis specialists.

Next year Nuremberg

Simultaneously with this year's Intergeo the Cologne exhibition centre was hosting the motorcycle show Intermot. Several Intergeo participants were found to have absconded to other halls, thus neatly combining work with hobby by visiting both shows. Some exhibitors even managed to combine motorbikes and GNSS systems on their own stands, a double whammy (Figure 7). Next year's Intergeo is to be held from 27th to 29th September in Nuremberg - I wonder if the work/pleasure mix will be on offer there too!

<https://www.gim-international.com/content/article/intergeo-3>
