TMS Tunnelscan Leica

Leica Geosystems presents TMS Tunnelscan, a data collection and evaluation solution for tunnel construction. In combination with the performance of the Leica HDS4500 imaging scanner TMS Tunnelscan provides information from tunnel excavation, through completion of excavation support, to lining acceptance check and tunnel commissioning. The Leica HDS4500 scanner system enables tunnel surveying with up to 500,000 points per seconds. The system's performance allows surveying without obstructing tunnelling works. Wider tunnel measuring campaigns with centimetre point grid can be done at up to 130 m/h. Additionally, measuring data from other scanner types, such as the Leica HDS3000, can be evaluated. Measuring and evaluation modules as well as intuitive software make up the Leica TMS Tunnelscan system solution, for example TMS ScanControl for the most efficient tunnel as-built survey with the Leica HDS4500 Scanner, TMS ScanRex for geo-referencing, TMS ScanCloud as a powerful analysis module for geo-referenced scanned data or the TMS ProFit for analysis of tunnel profile measurement data.

Source: Leica Geosystems
Internet: www.leica-geosystems.com

Océ CS2044 & CS2024 Colour Systems

Océ offers users colour for every wide format print job with the Océ CS2044 & CS2024. These new colour systems, with printing widths of 44 and 24 inches, respectively, can be used for CAD, GIS, 3D renderings and colour graphics. They meet the need of single users and small workgroups to handle all their print output in house on a single system. With a choice of using the standard Windows driver or one of the two optional RIPs, the workflow can be matched to the user's needs. Onyx CADPro provides an efficient way to print vector files without opening them in the originating application. Or for users with colour graphics files to print, Onyx GraphicsPro adds PostScript processing, a full PANTONE colour library for accurate PANTONE colour matching, extended media profiles and other relevant features. The predefined Océ printing preferences automatically select the right settings for each print job, the same applying to the Océ media profiles. The Océ media profiles are meant to make a perfect matching of inks and media to the printer. Results are right first time with all Océ media, and are also consistent between jobs and over time. The Océ CS2044 & CS2024 can be upgraded by adding a RIP to the basic printer, or Onyx CADPro users can migrate to Onyx GraphicsPro if they need to add a colour graphics capability. Users can also benefit from support of the Océ service organisation as well as from the Océ supplies range.

Source: Océ
Internet: www.oce.com

Applanix Ships L2C-ready Solution

Applanix is now shipping L2C ready L1/L2 GPS receivers in its Position and Orientation System (POS) products. The POS products are used as a component for the company's air, land, and marine integrated inertial/GPS geospatial solutions. The new GPS receivers have been built with the future capabilities of GPS in mind, allowing L2C functionality to be activated via an in-field feature upgrade. Users can now be ready to take advantage of the L2C capabilities when available, without the need to invest in additional hardware. Anticipating the additional workload of more complex signals during acquisition and tracking, the L2C capable receivers contain hardware and firmware to support the longer codes of the new GPS signal format. The L2C GPS signal has been designed for civilian use, and offers a carrier phase differential solution for precise RTK positioning. Used in conjunction with the original L1 GPS carrier signal, ionosphere delay and other distortions become more correctible, resulting in greater position, navigation and timing accuracy, and reliability. The L2C GPS signal will also offer better L2 signal to noise ratios because receivers can track the L2C code directly. This makes it easier to resolve and reduce multipath effects, or incorrect position readings resulting from signal reflections.

Source: Applanix
Internet: www.applanix.com

EuroGeographics Launches EuroMapFinder

EuroGeographics launched EuroMapFinder, the ISO 19115 compliant, discovery level, metadata service. Containing information on some 170 products from 16 EuroGeographics members, it represents a significant and early contribution to INSPIRE. Built on the "geocat.ch" service, developed by KOGIS, the Swiss federal coordination for Geoinformation, a user can query the metadata by keyword or geographic area of interest. Maintenance of the data is achieved through a remote update facility. The launch of EuroMapFinder represents the first step towards a distributed service. One EuroGeographics member from Switzerland, Swisstopo, has already connected their metadata system to EuroMapFinder, whilst the Bundesamt für Kartographie und Geodäsie, Germany, and Maanmittauslaitos, Finland, plans to do the same this year.

Source: EuroGeographics
Internet: www.euromapfinder.net

ER Mapper Releases MBC

ER Mapper has released ER Mapper Mosaic-Balance-Compress (MBC), retailing for US$1000. Using ER Mapper's mosaicking and colour balancing technology, MBC turns a collection of image tiles into a single compressed image mosaic. The mosaic allows an uninterrupted view of an entire land area without having to traverse hundreds of smaller image tiles. The image mosaic can be used in any GIS, CAD, desktop or web application. The image compression technology in ER Mapper MBC can compress images to just 5% of the original size without any visual difference in the imagery. The mosaic can be compressed using ER Mapper's industry standard ECW, or the emerging ISO standard JPEG 2000, image formats. A free evaluation copy is available at www.ermapper.com/mbc/.

Source: ER Mapper
Internet: www.ermapper.com

Laser-Scan Launches Radius Studio

Laser-Scan's Radius Studio acts as a spatial processing, analysis and compliance engine. It offers domain experts the possibility to create, review and refine business rules for spatial data across the web without them requiring developer skills. It is a tool that can quantitatively measure spatial data quality by analysing the compliance of business rules with existing data sets.
Laser-Scan was the first company to offer a fully interoperable and standards based, server-side topology engine for an Oracle relational database. The company has been running a beta programme for Radius Studio that includes organisations such as IBM, Ordnance Survey Ireland and Tele Atlas. All of these companies will be presenting how they manage business rules in a spatial data environment and their experiences on the Radius Studio Beta Programme.

Source: Laser-Scan
Internet: www.laser-scan.com/technologies/enterprise/radius_studio/index.htm

New Version of ESRI GIS Portal Toolkit

ESRI announced the availability of GIS Portal Toolkit 2.0.1. This new version includes improved handling and validation of metadata, more detailed documentation, and support for harvesting and publishing to and from ArcIMS 9.1 metadata repositories. It also offers support for additional database management systems, servers, and operating systems. The GIS Portal Toolkit is a technology and services solution for implementing local, regional, national, and global spatial data infrastructure portals. GIS portals organize content and services such as directories, search tools, community information, support resources, data, and applications. They provide capabilities to query metadata records for relevant data and services and link directly to the online sites that host content services. The content can be visualized as maps and used in geographic queries and analyses.

GIS Portal Toolkit 2.0.1 offers:

- Support for Windows 2000/XP/Server 2003, Red Hat Enterprise Linux 3, and Sun Solaris 8;
- Database management system support for SQL Server 2000/2003, Oracle9i, and DB2 8.2;
- Detailed installation documentation for the supported operating systems and supported databases;
- Ability to download metadata documents in XML files to local Drives;
- Improved handling and validation of Metadata Content Type in published metadata documents;
- Support for harvesting and publishing to and from ArcIMS 9.1 metadata repositories.

Source: ESRI
Internet: www.esri.com/gisportal

GPS+GLONASS Capability NovAtel

NovAtel's new line of OEMV Global Positioning System (GPS) receivers will be capable of tracking satellites from the growing Global Navigation Satellite System (GLONASS) constellation. Initial releases of the OEMV-2 and OEMV-3 models are expected to be available to customers by the end of March, as previously announced in September 2005, and will include dual-frequency GLONASS measurements as an option. Future releases will include full position and Real-time Kinematic (RTK) options as well as a GLONASS enabled, single-frequency OEMV-1 model. NovAtel's announcement of GPS+GLONASS capable OEMV receivers follows a recent launch of new GLONASS satellites and a commitment from the Russian government to continue to strengthen the existing GLONASS constellation. In addition to GLONASS capability, the OEMV product line supports modernized GPS signals and frequencies (L2C and L5), NovAtel's latest Vision Correlator multipath mitigation technology, an expanded Application Programming Interface (API), and integrated L-band functionality. NovAtel's OEMV receivers are also designed to meet the European Union's new Restriction of Hazardous Substances (RoHS) directive, which comes into effect in mid-2006.

Source: NovAtel
Internet: www.novatel.com

ArcPad 7 and ArcPad Application Builder 7

ESRI's newest versions of its software package for mobile geographic information system (GIS) and field-mapping applications, ArcPad 7 and ArcPad Application Builder 7, are now shipping. ArcPad provides field-based personnel with the ability to capture, store, update, manipulate, analyze, and display geographic information. New features in ArcPad 7 include:

- Quicker access and loading of spatial data;
- Support for ArcGIS symbology and style sheets;
- Advanced editing tools including offsets, repeated attributes,segmented line features, snapping, and undo;
- Integrated support for rangefinders and digital cameras;
- Support for freehand marking and taking notes on maps;
- Usability enhancements that streamline connecting a GPS;
- Support for new raster data formats: JPEG 2000, TIFF, MrSID MG3, and GIF;Simple form customization within ArcPad.

ArcPad Application Builder, the development framework for building custom ArcPad applications for mobile GIS, is sold separately and has also been updatedSome new features in ArcPad Application Builder 7 include:

- A wizard for creating forms;
- Improved script and XML editing tools;
- Compile tool for customization projects and ability to download compiled projects directly to device; Support for Jscript;
- Expanded ArcPad Object Model: new rangefinder, FTP, archive, and multimedia objects;
- Expanded extensions API: new interfaces for cameras, rangefinders, projections, and datum transformations.

Source: ESRI
Internet: www.esri.com/arcpad

VxEos MODIS Ground Station System Vexcel

Vexcel Corporation announced the immediate availability of its VxEos MODIS ground station offering. Modeled after Vexcel's APEX ground station, the VxEos is a cost-effective, scaled-down MODIS version capable of receiving and processing the direct broadcast downlinks from the EOS Aqua and Terra, and future NPP / NPOESS, satellites. The VxEos includes a 2.4m X-Y antenna in a radome, X-band feed, LNA, programmable downconverter, MODIS receiver, data capture system, data processing and visualization workstation, integrated NASA GSFC Lo to 1B and L2 processors. The included VxEos ground station management software suite runs under Linux and MS Windows and features utilities to schedule, track, receive, process and visualize MODIS data in a user-friendly graphical environment. Optional peripherals include NOAA AVHRR reception, a 6 TB networked attached storage device and a 160/320 GB Super DLT tape drive for archiving.

Source: Vexcel Corporation
Internet: www.vexcel.com

Leica Geosystems Announces Cyclone 5.4

Leica Geosystems announces the immediate availability of Cyclone 5.4 software to streamline workflows in the field and office for High-Definition Surveys.
Key new features include:

- Six New Visualization Tools: For faster navigation through point cloud data;
- "Single User" Setting: New option for faster point cloud loading and management;
- Automated Target Recheck: Improves survey quality and project productivity via field QA/QC checks.

Leica Geosystems' High-Definition Surveying (HDS) hardware and software solutions are used for conducting as-built, engineering, topographic and detailed geometric surveys within the AEC and industrial facilities markets. Cyclone enables users to efficiently register, geo-reference, and process laser scan point cloud data into deliverables. Cyclone 5.4 provides visualization tools that allow users to select from several display methods. A new "See-through" mode allows users to see-through walls for easier viewing. A "Silhouette" mode enhances object edges to speed a user's comprehension of objects such as piping. New point thickness and realistic shading controls provide more visual cues for faster navigation. Another new feature allows users to import and "Drape" high resolution digital photographs over the scan data set, indexing the photographs to the underlying point geometry. The new "unshared" access mode provides a 2x to 4x boost in database loading and navigation performance for many operations. As the use of scanning grows, database sizes are increasing. Cyclone 5.4 addresses this trend with new compression and optimization features that allow users, in either workgroup mode or unshared mode, to load and save data up to 4x faster and transfer it to other systems more efficiently. With Cyclone 5.4, surveyors are provided with a new set of features for quickly generating traditional deliverables, such as 2D drawings, from laser scan data. An enhanced "fit-edge" feature automates line-work creation for items such as curb edge, flowline and building outlines. In addition, the Virtual Surveyor module now allows users to import industry standard feature code sets rather than having to manually key in feature codes. Users can also apply line connecting codes and automatically create chains of line-work in a productive manner. Finally, all of this geometric and point coded data is exported into ASCII text files, DXF, Cyclone Object Exchange (COE) or XML for tight integration with other downstream software applications. Cyclone 5.4 supports Tablet PC users with stylus-driven operation without keyboard or mouse intervention. A new "Recheck Targets" function now automates the acquisition and analysis of previously referenced targets; this can speed up the process of verifying control points before breaking down the scanner setup.

Source: ESRI
Internet: www.esri.com

Microsoft Releases MapPoint Web Service 4.1

Microsoft announced the launch of Microsoft MapPoint Web Service 4.1 with expanded map coverage, worldwide city-to-city routing and improved frequency of ZIP code updates. Building on the mapping capabilities of version 4.0, the latest version includes expanded map coverage of Central and Eastern Europe, Northern Africa and South America. More than 150 cities in those regions now having street-level coverage, including locations of bodies of water and select points of interest such as airports, parking areas and train stations. New data sources for Central and Eastern Europe were provided by AND Automotive Navigation Data. This enables partners and customers of MapPoint Web Service 4.1 to build applications that will determine the location of places worldwide and routes between them, including routing across waterways, continents or country boundaries, company officials said. MapPoint Web Service is a programmable Extensible Markup Language (XML) web service that integrates mapping capabilities into business or consumer applications. It supports Simple Object Access Protocol (SOAP) and XML interfaces.

Source: Microsoft
Internet: www.microsoft.com

Release ArcGIS 9.1 Business Analyst

ESRI released ArcGIS 9.1 Business Analyst desktop analysis software with 2005/2010 demographic data. ArcGIS 9.1 Business Analyst includes:

- Complete integration with the ArcGIS 9 framework;
- Routing and drive-time tools based on ArcGIS Network Analyst;
- Enhanced reporting capabilities with a batch framework and a custom report wizard;
- Updated datasets, such as 2005/2010 demographic data and forecasts, and segmentation data from Community Tapestry down to the census tract level;
- infoUSA business data and street data from the flagship Dynamap/Transportation data product from Tele Atlas North America, Inc.;
- New techniques to create, manage, and compare trade areas;
- New Huff Sales Forecasting Models;
- Automated report booklet creation wizard.

Source: ESRI
Internet: www.esri.com/businessanalyst

R8 GNSS System and NetR5 Reference Station Trimble

Trimble introduced the Trimble R8 GNSS system and the Trimble NetR5 reference station receiver with added Global Navigation Satellite System (GNSS) capabilities. The positioning products, with Trimble R-Track technology, support GPS L2C and L5 signals as well as GLONASS. The Trimble R8 GNSS system is a multi-channel, multi-frequency, GNSS receiver, antenna, and data-link radio all in one compact unit. Powered by a Real-Time Kinematic (RTK) engine, R-Track technology in the Trimble R8 GNSS now supports both the GPS L2C and L5 signals and GLONASS L1/L2 signals. The Trimble R8 GNSS system's communication options include an internal 450 MHz radio option for use as a cable-free base station and an internal GSM/GPRS option for Internet connectivity and use as a rover in a Trimble Virtual Reference Station (VRS) network. The Trimble R8 GNSS system is designed to support Trimble's Integrated Surveying solution. Surveyors can combine GPS and optical data in one job file in Trimble field software such as Trimble Survey Controller software. They can transfer the job file seamlessly to the Trimble office software for processing. The Trimble R8 GNSS can also be used as part of a Trimble I.S. Rover. In order to do so the user adds a prism to the rover pole and partners the Trimble R8 GNSS with a robotic optical system such as the Trimble S6 Total Station.

The new Trimble NetR5 reference station is a multi-channel, multi-frequency, GNSS receiver designed for use as a stand-alone reference station or as part of a GNSS infrastructure network solution. The receiver also supports the next-generation GPS L2C and L5 signals as well as GLONASS L1/L2 signals. The Trimble NetR5 is rugged and lightweight, and consumes little power due to its purpose-built Application Specific Integrated Circuit (ASIC) platform. The Trimble NetR5 can operate for a full work day in extreme conditions without a battery charge. Configuration takes place via its front panel; a software interface is not required. The front panel also enables the user to quickly check the receiver's status. Large amounts of data can be easily collected, stored, and transferred via the Trimble NetR5 receiver's expandable memory. The receiver supports USB devices such as memory sticks as well as external hard drives. The Trimble NetR5 also offers "FTP Push", which automatically and securely uploads files. There is no need to manually copy receiver files. The receiver can also function as an FTP server for users wanting to retrieve files manually. The receiver has an internal battery which will act as backup in case of any external power failures. The Trimble NetR5 works seamlessly with Trimble's GPSBase and GPSNet infrastructure software. Additionally, the software has security options to restrict access to only those who are permitted. The software is available in eight languages.

Source: Trimble
Internet: www.trimble.com