

## 51<sup>st</sup> Photogrammetric Week 2007

### Leica Geosystems Photogrammetric Sensor and Workflow Developments

Juergen Dold

03 September 2007

- when it has to be **right**

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## Measurement Technologies from Micro to Macro



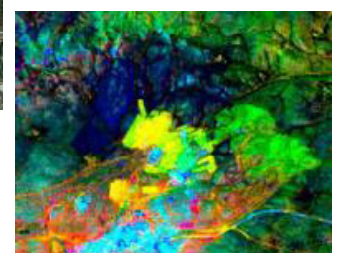
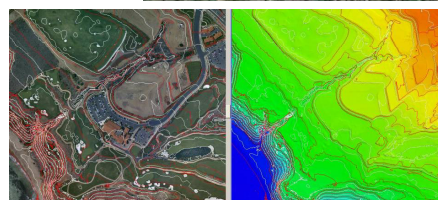
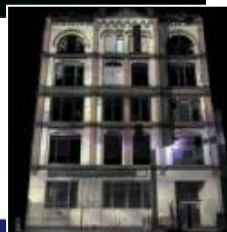
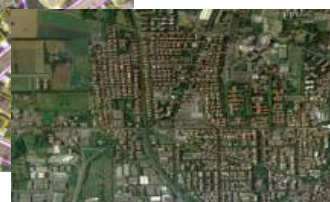
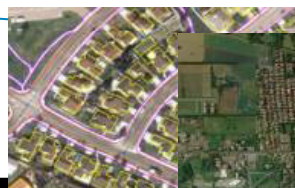
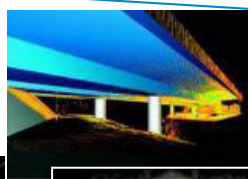
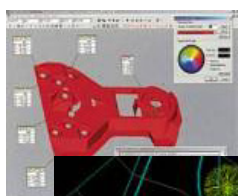
Micrometers

**Micro**

Millimeters

**Macro**

Meters



**HEXAGON**  
MEASUREMENT TECHNOLOGIES

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# End-to-end solution for Terrestrial Laser Scanning

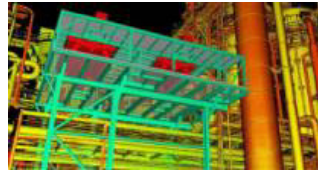
## ToF Based Sensor

Accuracy  
@ Long Range  
@ 50kHz



## Software Solution

Cyclone



Cloudworx for  
AutoCAD  
Microstation  
PDMS

TrueView

Web Viewer for point cloud projects



## Phase Based Sensor

Highest Speed  
@ 500kHz



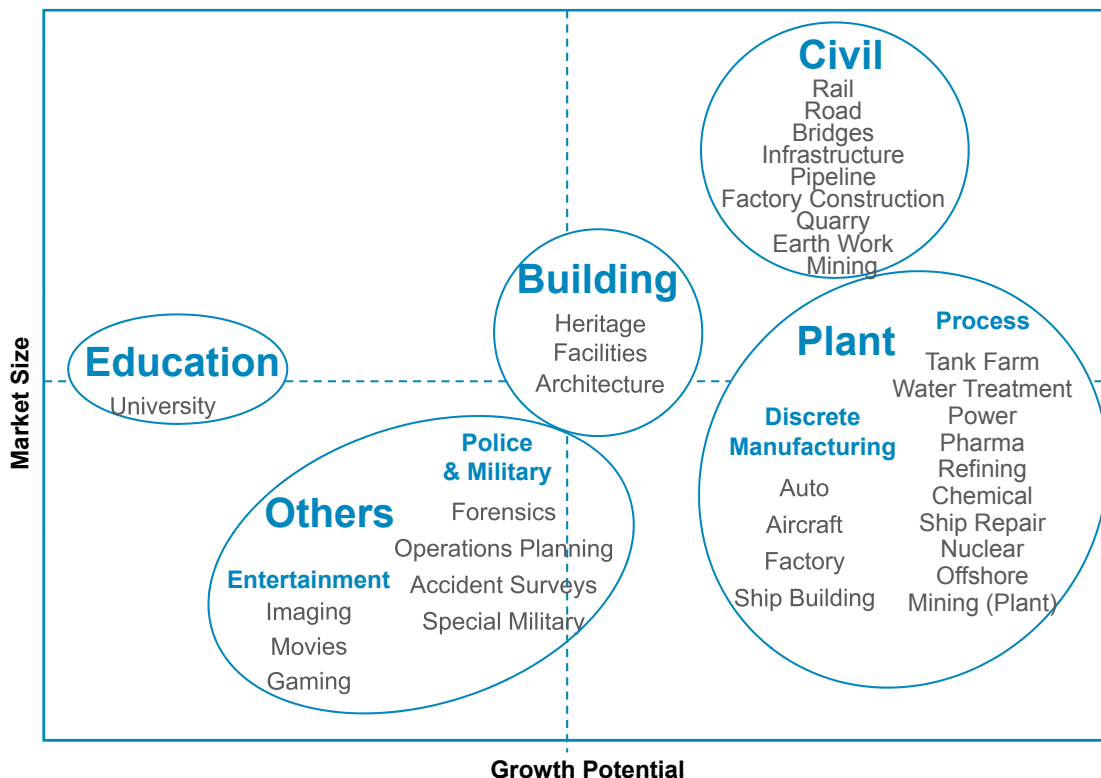
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# Terrestrial Laser Scanning – a growing market!



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# Most complete airborne sensor portfolio!

## Imaging Sensors

ADS SH52



ADS SH51



RCD105



## Supplementary Solutions

Flight Planning



Flight Control



Position and Attitude System

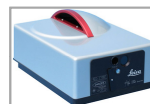


Sensor Mount

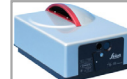


## LIDAR Sensors

ALS50



ALS CM



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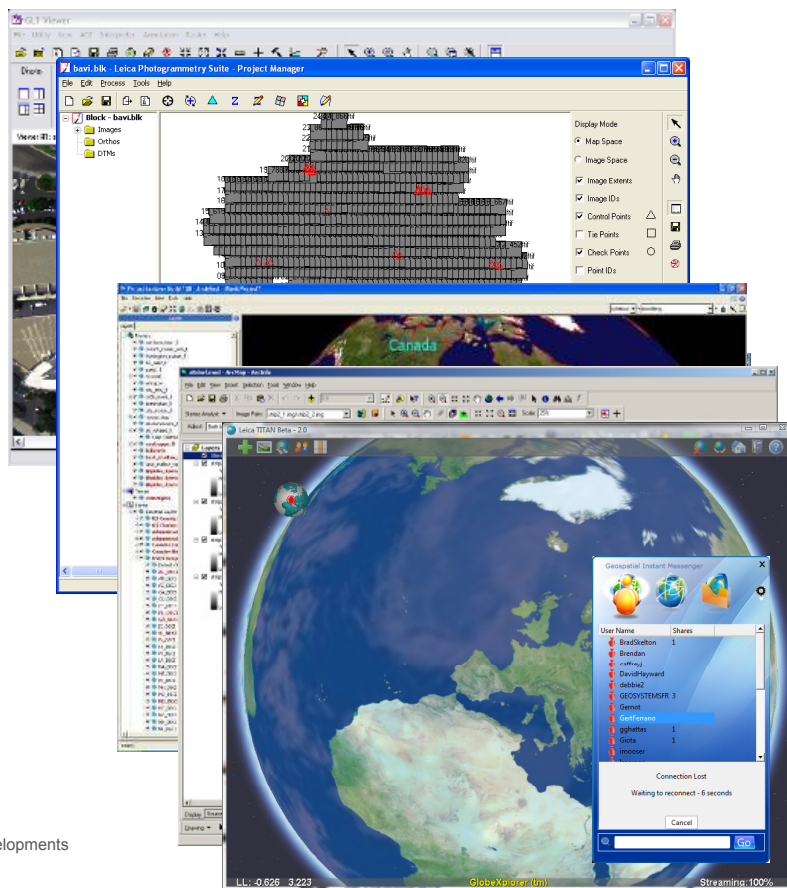
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# Geospatial Imaging Product Lines

- ERDAS IMAGINE
- Leica Photogrammetry Suite
- Leica Virtual Explorer
- Extensions for ArcGIS
- Leica TITAN

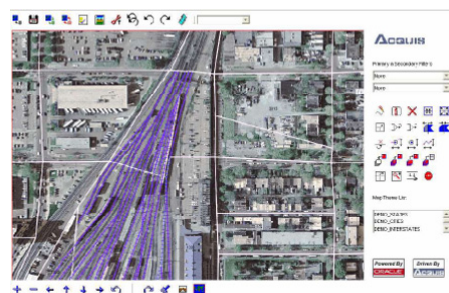


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# Acquired Technologies

**Acquis** – Enterprise Topological Vector Handling



## Enterprise



### Image Web Server

A high-performance, specialized server application that efficiently stores and distributes large volumes of geospatial image data.

**ERMapper** – Robust high performance Image Compression and Image Serving



**IONIC** – OGC Compliant Enterprise Technologies for Standards Based Interoperability

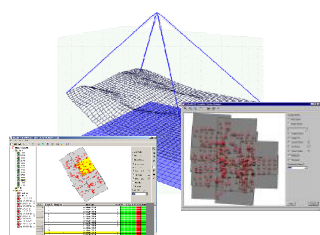
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# Bringing Geospatial Solutions to the Enterprise

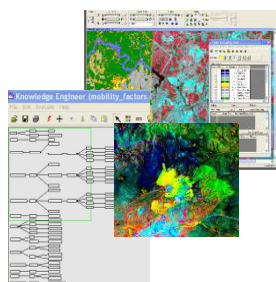


**PHOTOGRAMMETRY**

**VISUALIZATION**



**REMOTE SENSING**



**Authoring Systems**

**THE ENTERPRISE**

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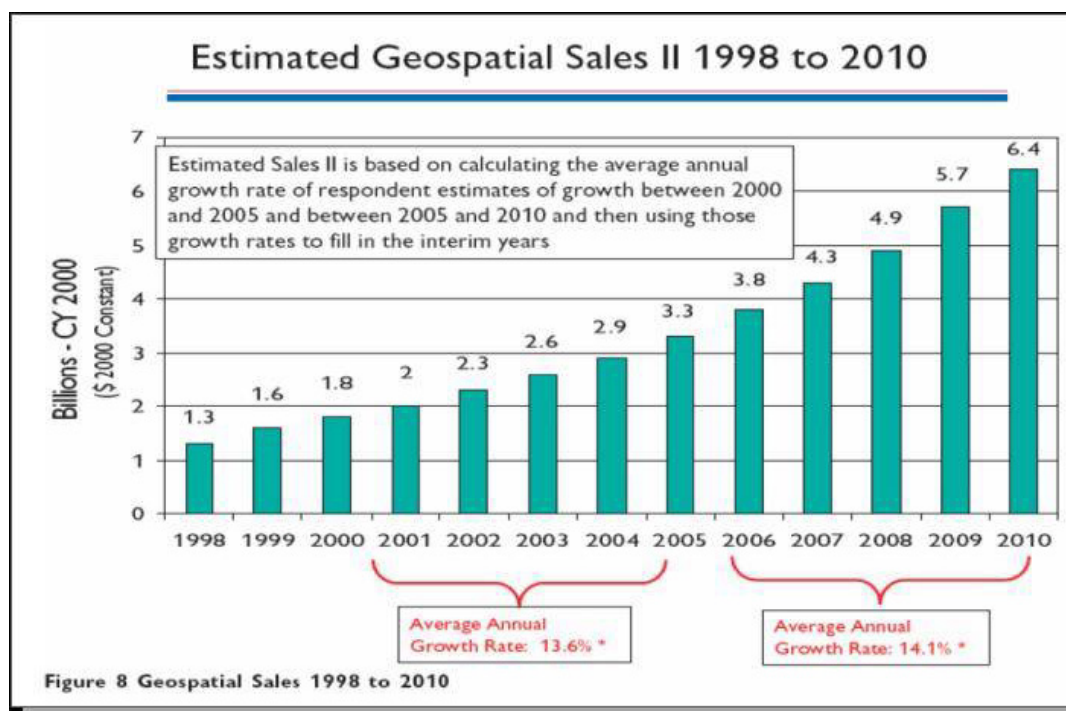
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# The geospatial market is growing!

In 10 years from \$1.8B to \$6.4B (2000/01 survey)



Source: ASPRS

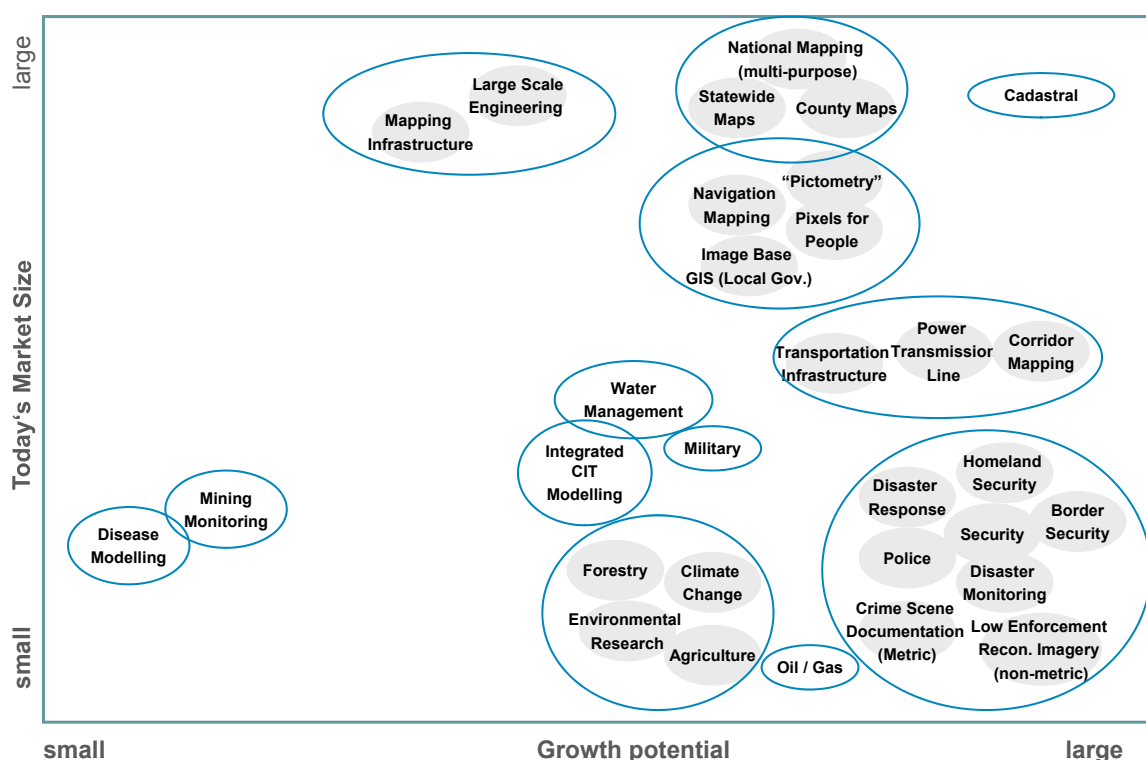
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# The geospatial market enters new segments!



Source: Leica 07

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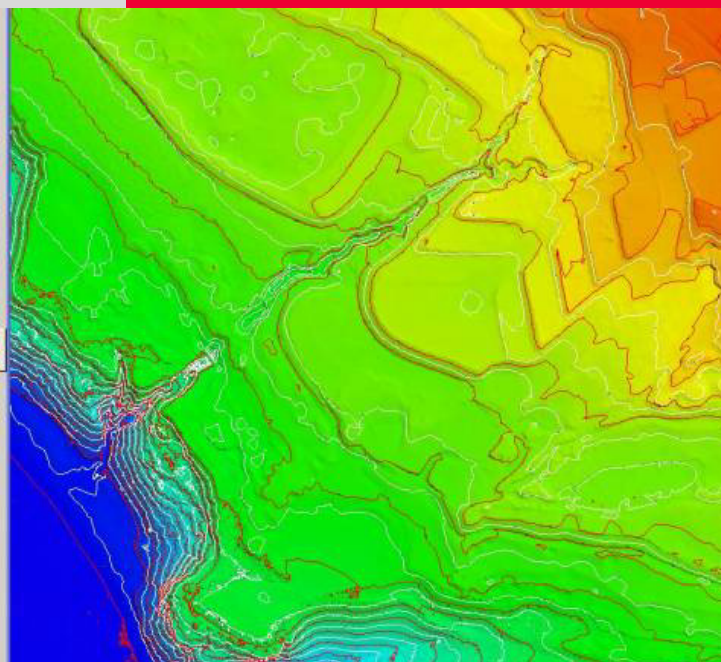
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# Please attend Leica Presentations

- **Technical papers:**
  - **Raising the Bar for Multi-Band High-Resolution Airborne Imagery**  
by Peter Fricker & Pavel Dokulil, ABS Product Managers,  
Tuesday, 9:10 a.m.
  - **Image Exploitation for the Enterprise**  
by Brad Skelton  
Thursday 10:10 a.m.
- **Leica is also pleased to present two separate demonstrations (Monday – Thursday 14:30 – 17:00):**
  - **Leica Airborne Imaging and LIDAR Sensor Technology**
  - **Enhanced Processing and Presentation of High Resolution Image Data with Leica Solutions**



**END**