

Cycloramas – DC's Arm Chair Asset Collection Solution



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<http://dc.gov>



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What if – Google Street View:

- Could be used in Government workflows
- Provided metadata (temporal, quality)
- Measurement capability
- GIS data integration

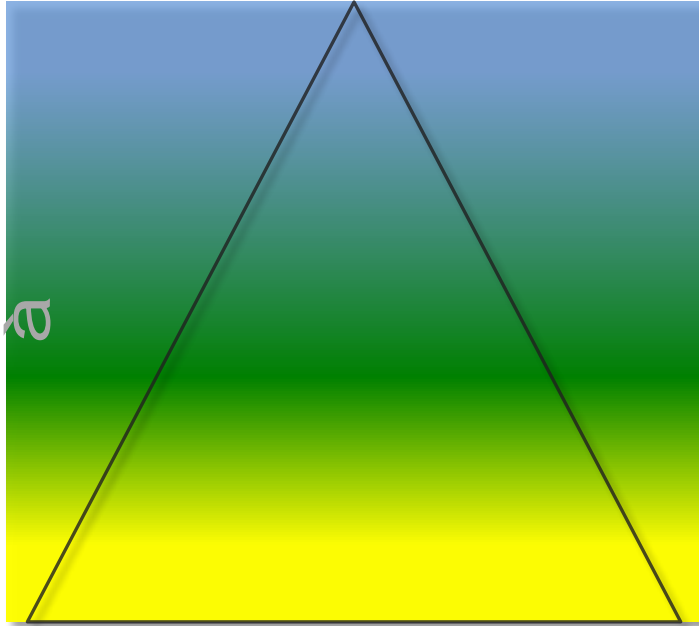


DC.Gov selected:

- q Cycloramas (*digital, spherical, 360° panoramic images*)
 - q High resolution
 - q Well defined internal image geometry
 - q Accurate georeference (10 cm) and orientation (0,1°)
 - q Complete Metadata
 - q All Roads and Alleys
- q Delivery through web hosting or local installation
- q Integrated with **ArcGIS** and AGO
 - q Data Collection Toolbar

High Quality data measurement / collection

Location precision



× Survey grade, precision 1-5 cm

× **GIS grade, precision 10 cm**

× Consumer grade, precision 1-20 m

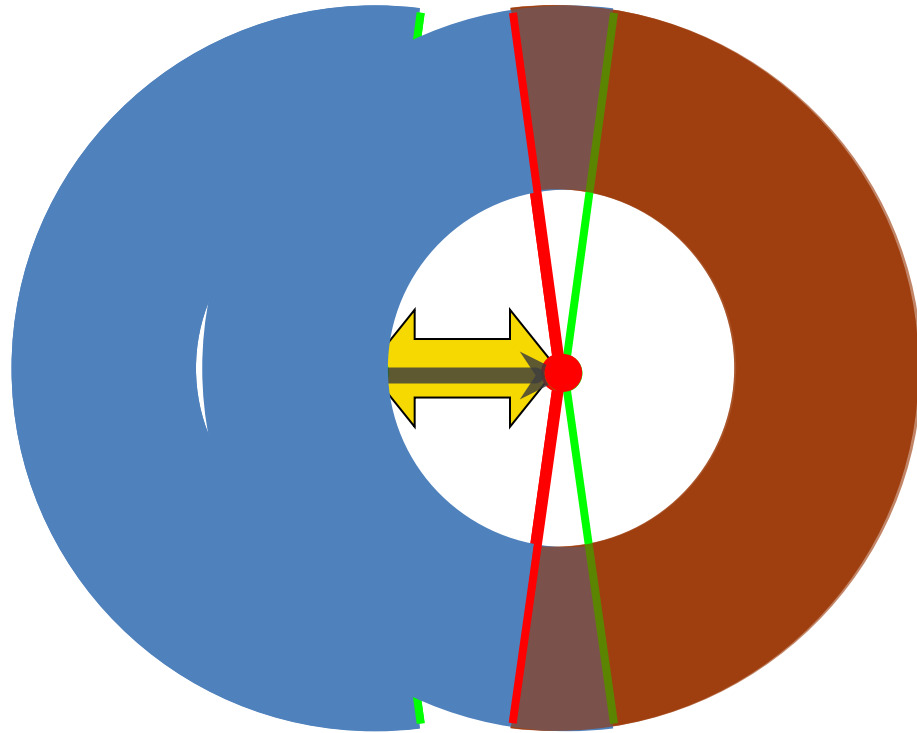
Cycloramas – Panorama Recording Principle



Fisheye lens configuration ensures complete 360 degree field-of-view is captured in singular vantage perspective

Dual 185 degree fisheye lens technology

Cycloramas – Panorama Recording Principle



The only practical way to obtain geometrically correct panoramic images, is to record from one SINGLE recording location

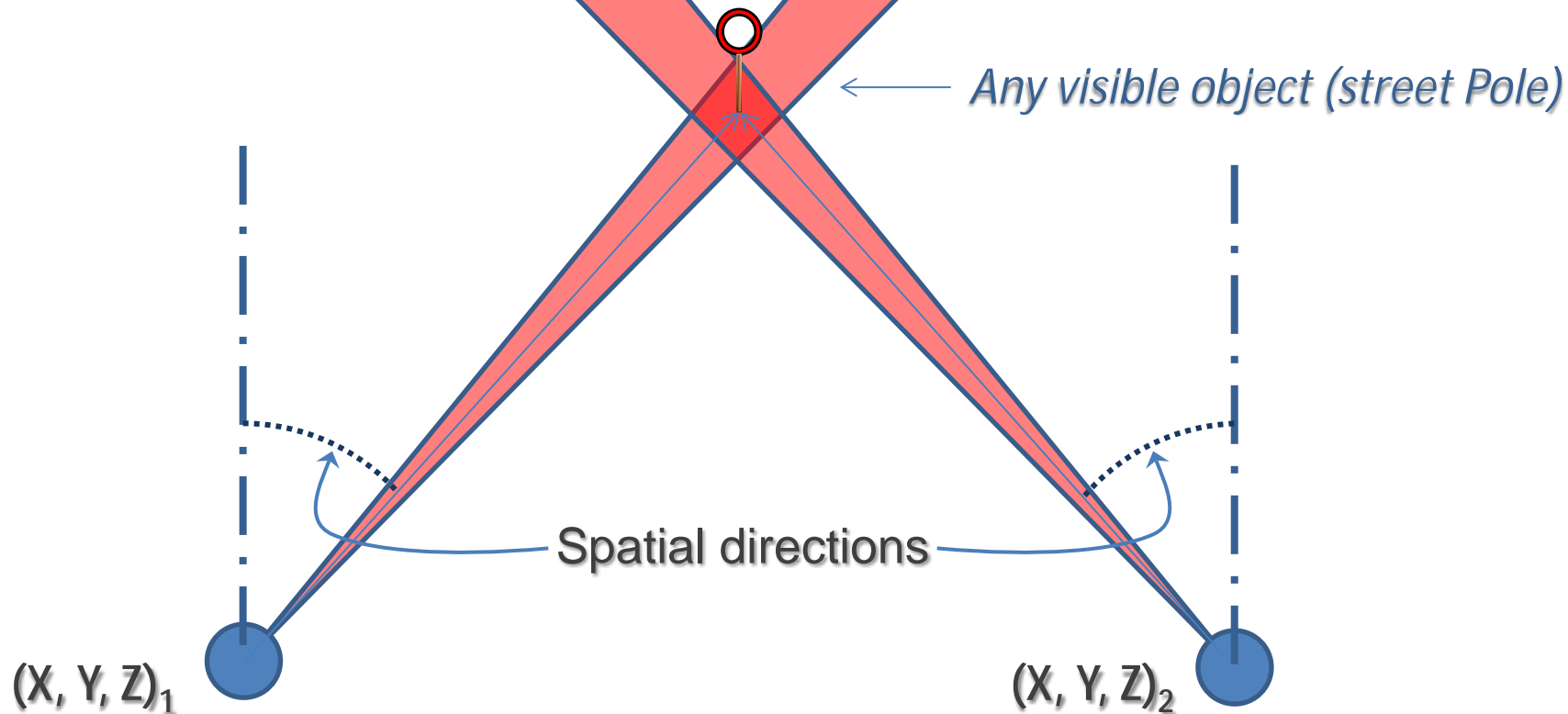
Patented Cyclorama Technology

Cycloramas – Panorama Recording Principle



Proven Robust System Design

Cycloramas – Measuring Principle (intersection)



Cycloramas – Measuring

The screenshot displays the Cyclorama software interface, which is used for measuring and managing panoramic images. The interface is divided into several sections:

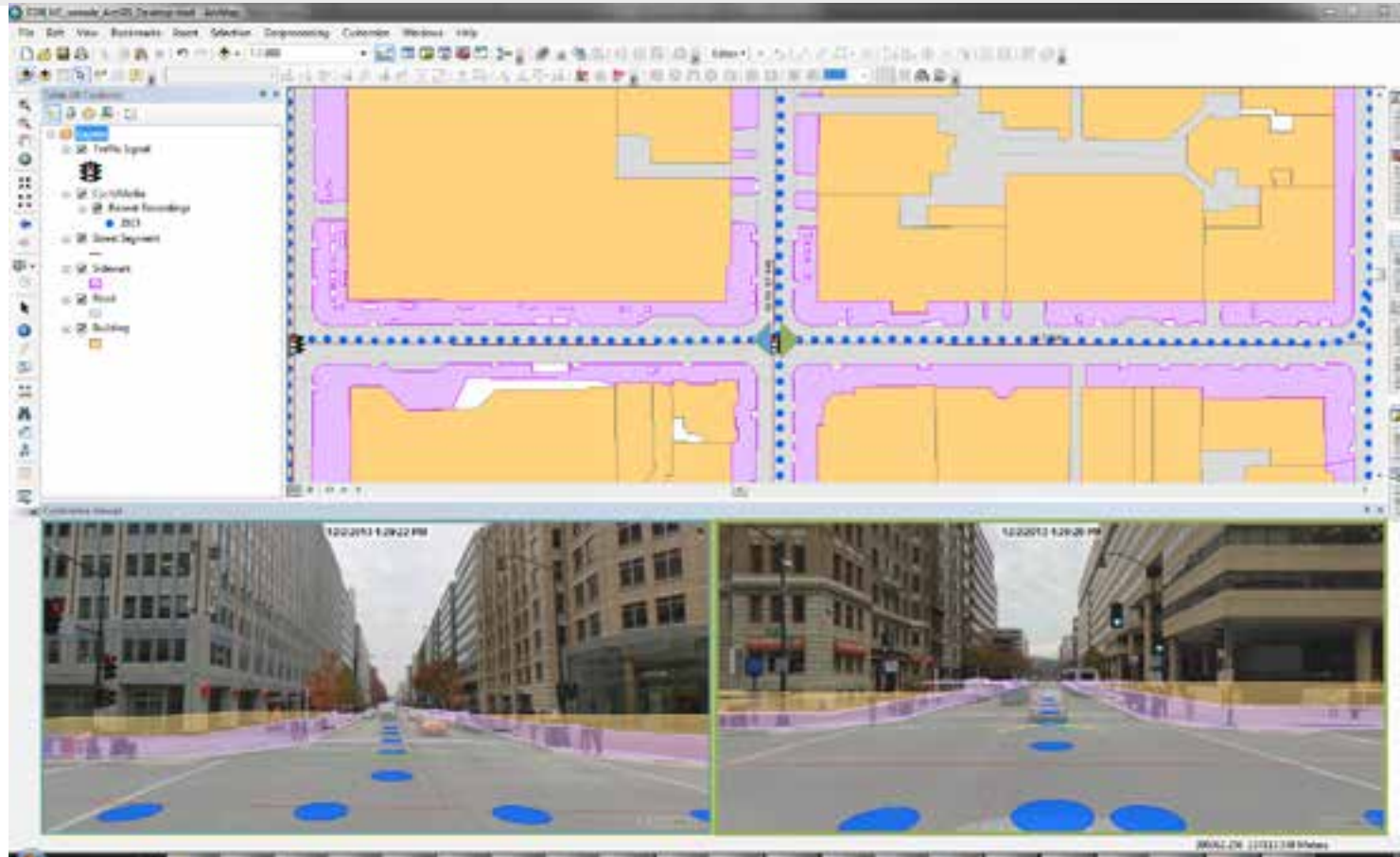
- Top Left:** A panoramic view of a street intersection with a silver car in the foreground and a red traffic light.
- Top Right:** Another panoramic view of the same intersection from a different angle, showing a crosswalk and a person walking.
- Bottom Left:** A map view showing the location of the panoramas on a street grid. A blue dashed line indicates the path of the panoramas.
- Right Panel:** A control panel with various settings and a table of measurements.

The right panel includes a table with the following data:

No	00x00m				
1	0.14852631	2			
2	0.06887834				

The interface also features a menu bar (File, Edit, Colors, View), a toolbar with various icons, and a status bar at the bottom with text like "All Rights Reserved" and "Copyright © 2008".

Cycloramas – ArcGIS Desktop Tools

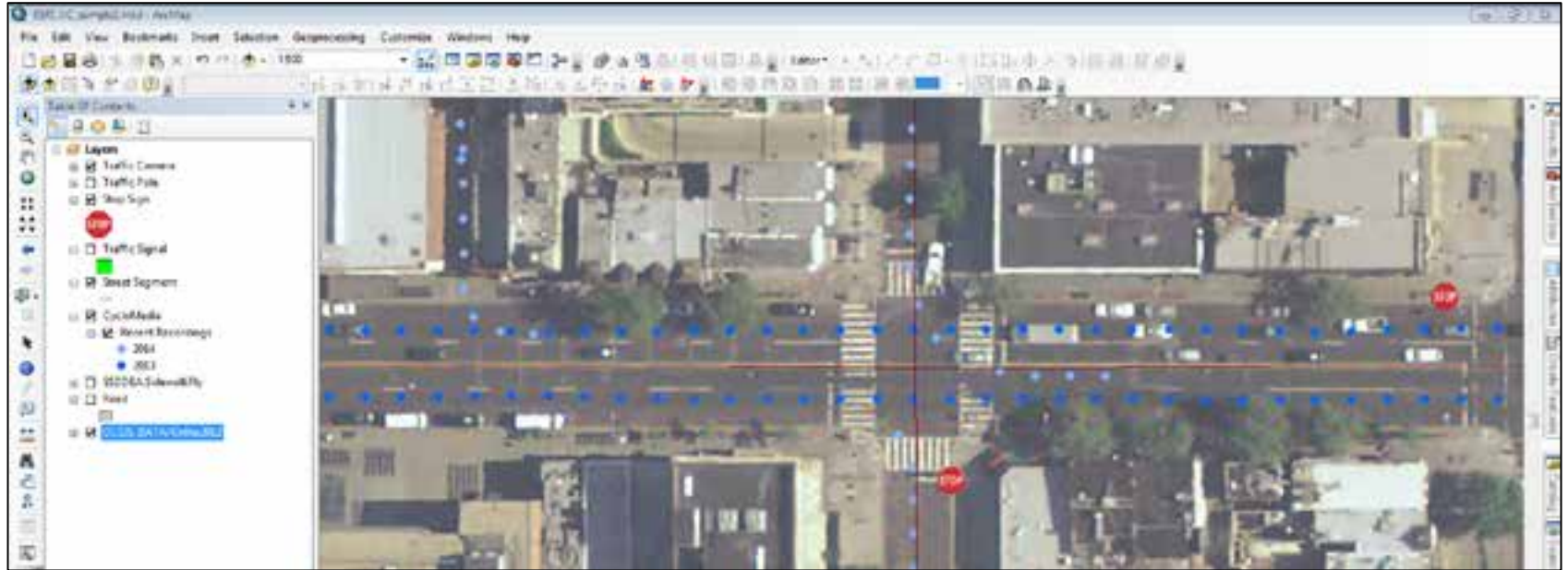


Texturing of 3D models using Cycloramas



Automated Extraction of textures and 3D forms

Detection and classification of traffic signs

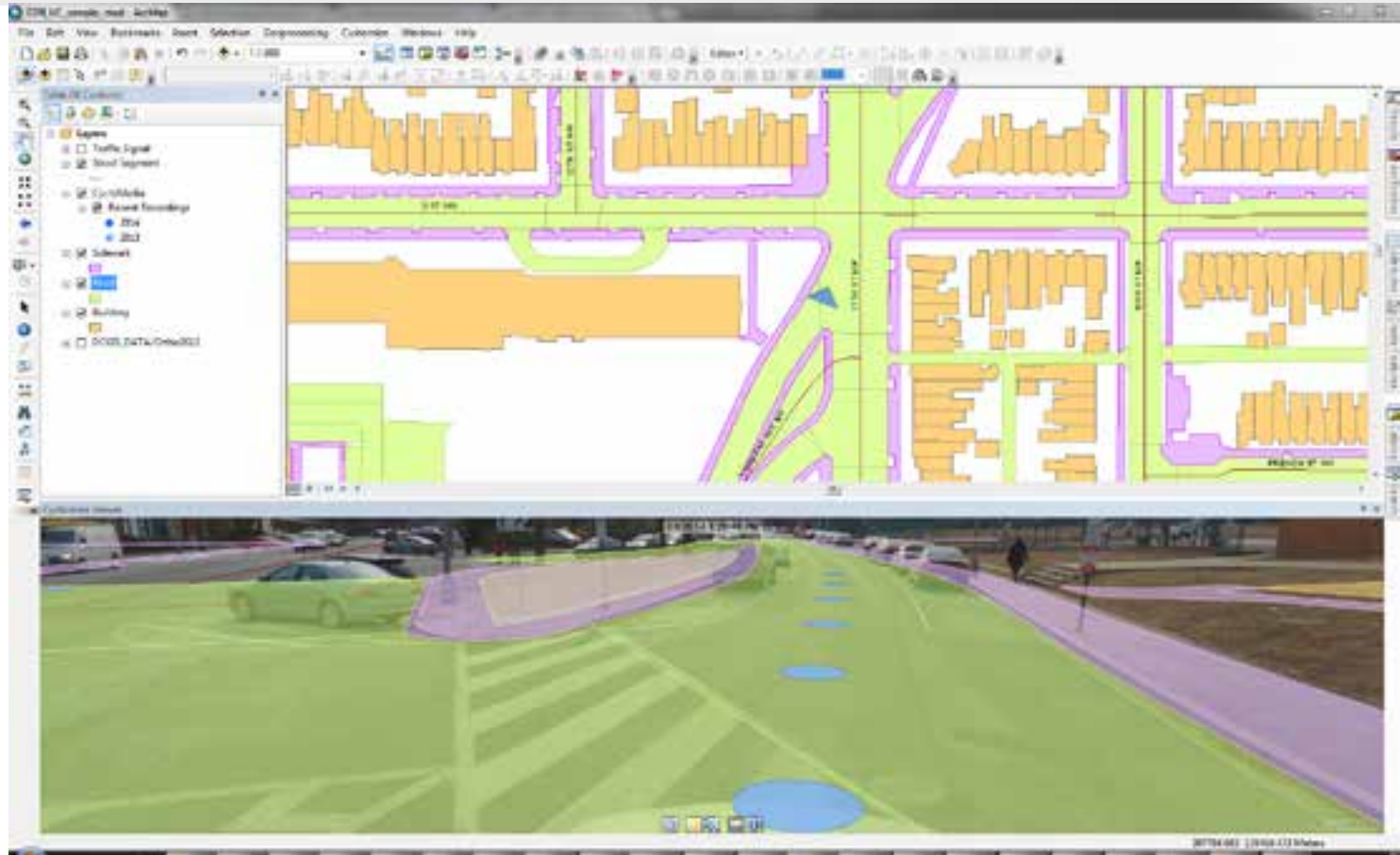


Panorama History for Change Detection

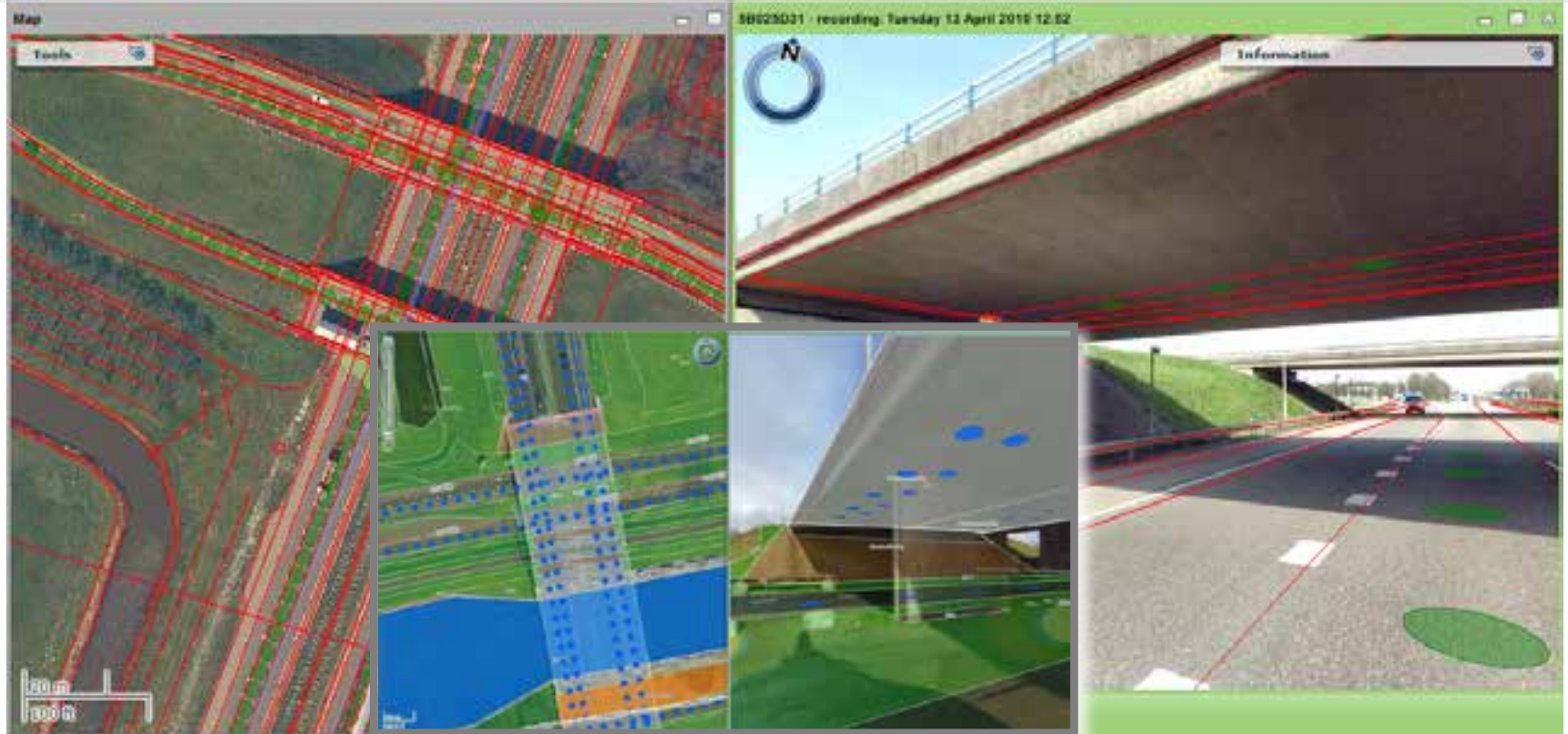


Multiple Annual collection datasets shows intuitive environmental and infrastructure changes.

Precise 2D Overlay



Precise 3D Overlay



Powerful 3D Visualization Solutions

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Thank You

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