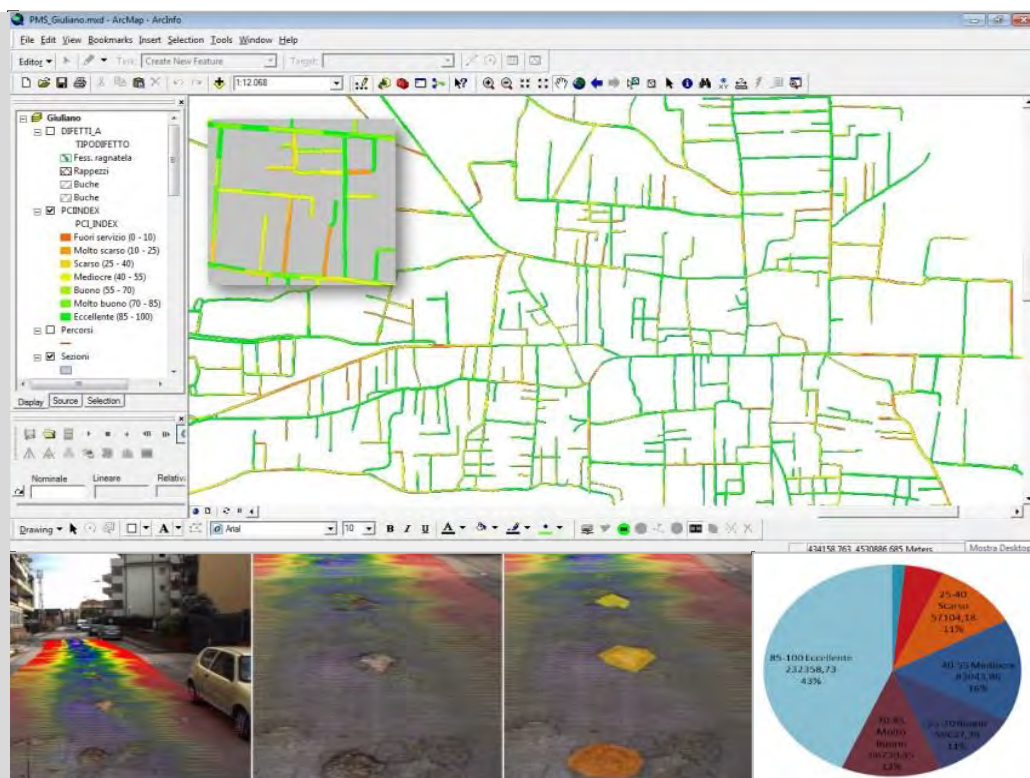


## Mobile Mapping Data Management

Module for the consultation of georeferenced images and point clouds surveyed with Road-Scanner or other systems. It provides a wide range of specialized features to produce and edit CAD drawings and GIS maps in an efficient way by keeping under control the geographical context. The module is also available as a plug-in for AutoCAD, ArcGIS and MicroStation, thus greatly simplifying the production of cartographic drawings in their original environment.

### Integration with the Asset Management and Pavement Management modules

Road-SIT is a complete suite of software modules for the Road Information System. All the mobile mapping features are fully integrated in these modules, to improve the GIS and road-side assets extraction and management.



Road-SIT Survey is fully compatible with the most widespread mobile mapping systems like the Optech-Lynx, Riegl-VX450, Topcon IPS3 and Leica Pegasus. And of course with the well known Siteco's Road-Scanner.

About Siteco: A unit of the Gavio Group, one of Italy's top industrial groups, Siteco was established in 1995 as a civil engineering and infrastructure, software and technical consulting. Since 2005 Siteco has developed scalable high performance mobile mapping systems and today it is the most flexible supplier on the market of roadway management mobile mappers in price, performance and software flexibility.

ON THE ROAD  
to Innovation

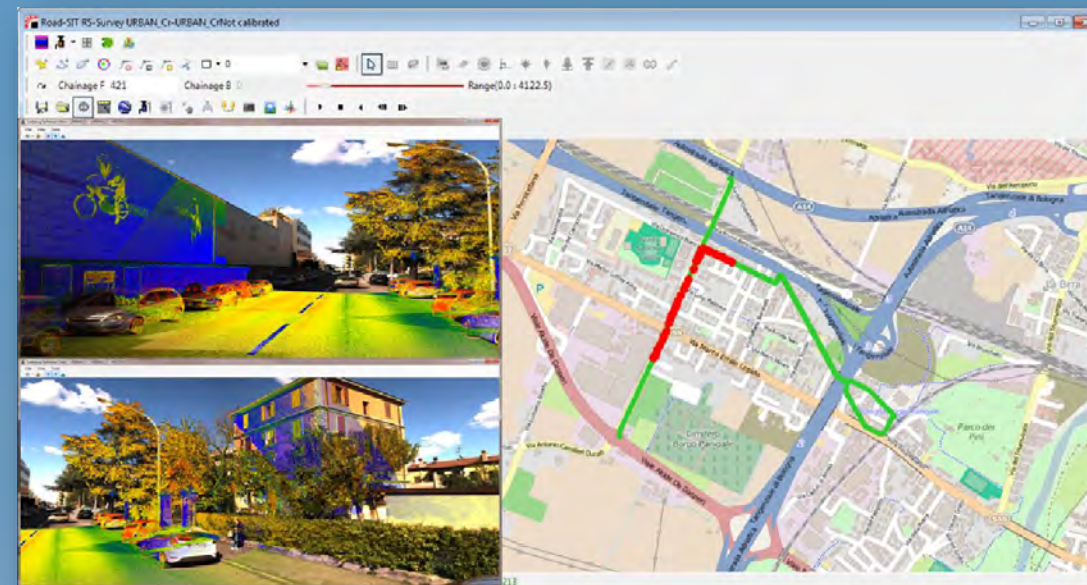
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## ROAD SIT SURVEY



**The complete software application  
to manage Mobile Mapping data**

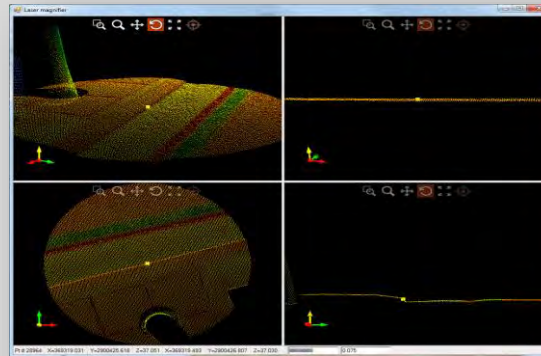


# POST-PROCESSING AND FEATURE EXCTRACTION SOFTWARE

Mobile Mapping and Cartography Application

## Road SIT SURVEY

Mobile Mapping data management and Cartography Application  
Ground Control Point calibration and mission Geodatabase editing  
AUTOCAD, ArcGIS and MicroStation plug-in  
Photogrammetry and snap to laser points  
Feature extraction and Edge detection



### Mission management and road Geodatabase

All the data collected during the surveys can be organized in a road geodatabase. The trajectories, the imagery and the point-clouds are generated according to the road-graph, thus ensuring an effective and easy access to the data.

The RMS values are displayed in the GIS environment to analyze the location of Ground Control Point calibration.

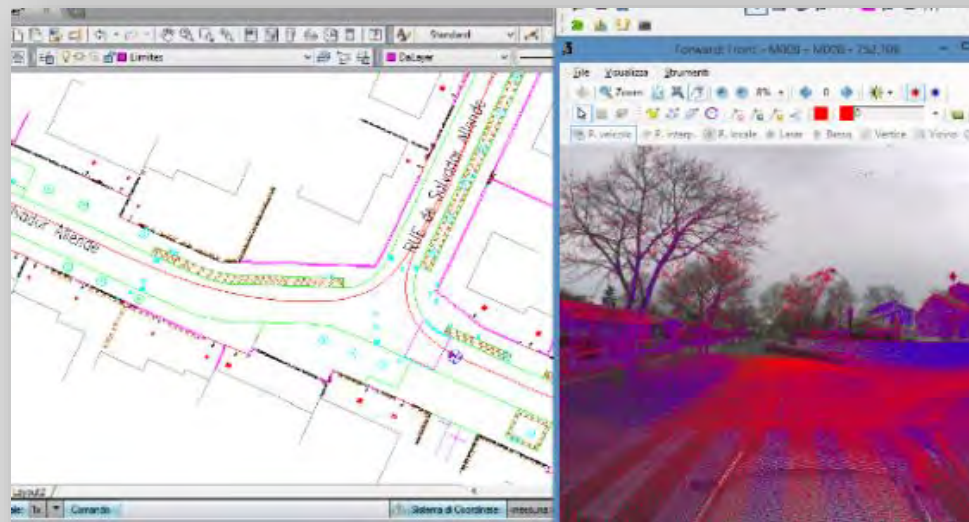
### Calibration by means of control points

The system includes sophisticated functions for the correction of the trajectories with the use of ground control points surveyed in a traditional way.

This method is used to fix the inertial drift in case of prolonged loss of GPS signal, as, for example, in tunnels, or in dense urban environments, and ensures, at the same time, a centimeter accuracy.

### Snapping tools to improve the feature extraction

The high-accuracy tools to select edges and surfaces already available have been improved with new features. Automatic detection of the highest and lowest point helps the user collimate points with maximum accuracy. Search areas can be increased or decreased using the circle radius tool, constantly updated on the magnifier window.



### Geodatabase editing

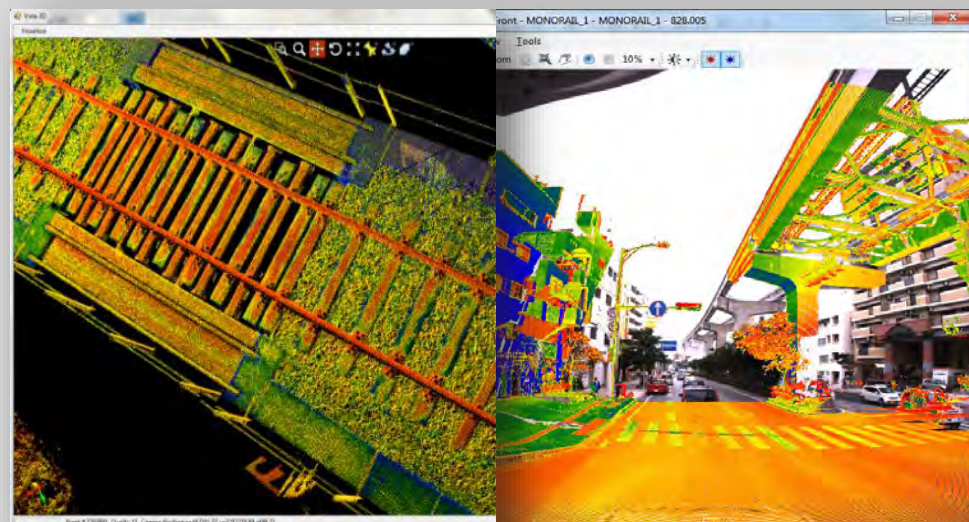
Special features for editing the geodatabase of the road information system, immediately available for any GIS system and for the Road-SIT Asset Management module.

### Data exchange

Road-SIT Survey allows you to export all the data in the most popular CAD and GIS applications in standard formats (JPEG, LAS, DXF, Shapefile). The application is also available as a plug-in for AutoCAD, MicroStation and ArcGIS.

### Drawing functions

A wide range of drawing functions allows you to produce detailed maps quickly and efficiently: buffers, cross-sections, sections on a generic plane; snaps to laser points or to existing vector entities; special functions to draw the edges or projecting a point onto a mean plane; coloring the points by altitude, reflectance and real color.



# NEW RELEASE 2015

The new Road-SIT Survey release features many improved functions to speed up the drawing of 2D and 3D maps, plus a revolutionary philosophy to make every user feel at ease by having the complete control of the geographical context

### A New User Interface

The new user interface is connected with the most widespread web-gis servers like Google Maps or OpenStreetMap. The access to the imagery and point clouds is always displayed in the geographical context. The "immersive" effect is enhanced by the ladybug spherical vision with the laser point clouds displayed in the top view. The Google-maps look&feel is enhanced with point cloud special snapping features and user definable color tables associated to each greyscale point reflectivity value.

### Search and load the surveys

Survey data is instantly accessed by selecting the position on the map or the road list displayed in the left dialog area. The current route and position of the imagery are constantly highlighted on the map making it virtually impossible to get lost !

### New Oct-Tree Technology

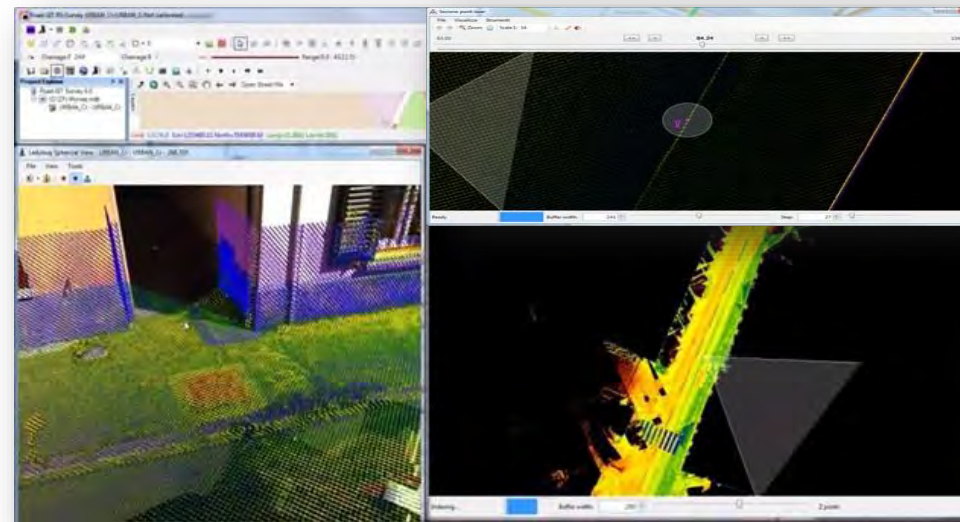
To improve the performance, the system is powered by an optimized oct-tree technology, allowing imagery and point cloud displays in real time. All the data are stored in a Microsoft SQL database requiring hardware compatible with 64 bit software and OpenGL compatible video devices.

### New point clouds color display features

A customizable color overlay table allows the definition of colored points based on greyscale reflectivity values. The point clouds can also be colored with the actual real color imagery.

### Combined navigation between spherical image and top view

The powerful implementation of the OpenGL libraries allows you to combine the spherical and the top views consistently. The area zoomed is constantly refreshed on the top view to provide complete control over the editing features.



### General features for exporting point clouds and imagery

The export features allow to produce any kind of data output for point clouds and imagery, including LAS, XYZ, DXF, PTS, TIFF, PNG, JPG, GIF, BMP formats. Special features for cross sections, pavement analysis and top view bitmaps have been added.

### Georeferenced tiled bitmaps (point cloud ortophoto)

The new settings also provides at the exportation of geo-referenced bitmaps that enables the production of the point cloud top view as a tiled ortophoto. The ortophoto can be immediately loaded in any CAD or GIS software and overlapped to the vector maps extracted with Road-SIT Survey (see image below). This is a very powerful new tool, that allows users to produce a GIS top view of the whole survey, very light and immediate to access, and to distribute.

