

CMIV-Map

Measuring in low resolution panoramic images on decimeter level

Quick fit measuring

Measuring our geographic environment is a highly specialized field. With high precision devices, surveyors and photogrammetrists can put spatial related data into a geometric form.

But how often do you want to know a position or a dimension, while accuracy is less important than the speed with which the information becomes available? For instance the length of a window frame, the width of a door entrance, the height of a crash barrier, etc.

Cycloramas

Frank Data has developed a unique method to measure required information yourself, without having surveyors' knowledge or leaving the office. To enable you to accomplish this, you need cycloramas. These are digital panoramic images with which you literally can look around in 360°.

To produce cycloramas, a car is equipped with a platform upon which a camera with a fisheye lens is mounted. The location and the orientation of every image are recorded. This not only gives you the possibility to retrieve images using map and address locations, but also to quickly measure every visible object with moderate precision.

CycloMedia ImageViewer Map

CMIV-Map is a measuring application from Frank Data's product family CycloMedia. With this application, in an ad-hoc mode, it is possible to determine quickly and simply the position and size of objects. This not only goes for dimensions in the horizontal plane, but in the vertical direction as well. In CMIV-Map it concerns measurements in lowresolution panoramic images with a precision on decimeter level. This as opposed to another application, CycloMedia Mapper, with which it is possible to measure in high-resolution cycloramas with centimeter level precision. CMIV-Map is developed from market demand for a simple measuring application that offers moderate precision. As, in practice measurements on decimeter level very often meet general requirements.



Using cycloramas you can quickly measure a lamppost (1,2), water drainage (3), overhead beam (4,5) and window frame (6-9)

Applications of CMIV-Map

Beside the significant advantage of having a realistic and objective view on reality, there is more than one reason why CMIV-Map is a very useful and effective tool:

- Of all objects visible in a panoramic image (360° around), such as trees, lampposts, water drainages, traffic signs, signboards, etc., positions can be determined on a decimeter level. This way CMIV-Map enables you to add more detail to digital maps.
- Lengths and areas can be measured instantly.
- Possible changes or mistakes in a digital map can be easily found and immediately corrected.
- In a combination with the feature of CycloMedia ImageViewer to project vector data into cycloramas, even distances can be measured from a pipeline or cable in a map to a door or façade in a cyclorama: an ideal method for ad-hoc dimensioning.





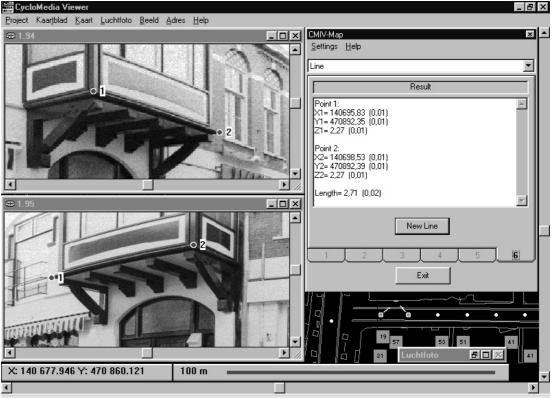
Frank Data is a supplier of optical data and systems. The developed systems are applied in the professional market for geographics and landsurveying applications.

How simple is CMIV-Map?

In less than a minute, in just a few steps, a user can determine the position or dimensions of an object. No landsurveying experience or special courses are required. To be able to measure one point, the identical points on two different panoramic images must be selected. For instance, to measure a length, four points have to be selected (see picture below).

Features and advantages

- No education required.
- Fast measuring of lengths and areas.
- Simple positioning of all visible objects.
- Includes 'positioning plug-in' for precise positioning of images by projecting geometric vector data.
- Added value of the Frank Data cycloramas.
- Extra details in a digital map.
- Track down possible errors and changes in a digital map.
- The resulting precision of each measurement is indicated.
- Standardized output of coordinates.
- Can be used in a combination with CAD, GIS or any database software.
- No extra hardware required for the employment of CMIV-Map. Only Windows 95 operating system is necessary.



CYCLO MEDIA

For more information on CycloMedia please contact Frank Data tel. +31 73 6579140 fax +31 73 6569356 e-mail: info@frankdata.com The width of the dormer is measured by two corresponding points in two cycloramas

