

**Top image** is a clip out of a well known video of Titanic. Here a sub marine circulates around the bow of Titanic and make a good quality video of what is there. This is a standard video and here we imported a PAL version into our software.

This system can use any video clip that covers the area of interest over an angular field of view. Image quality is preferable good so many details can be seen on several images.

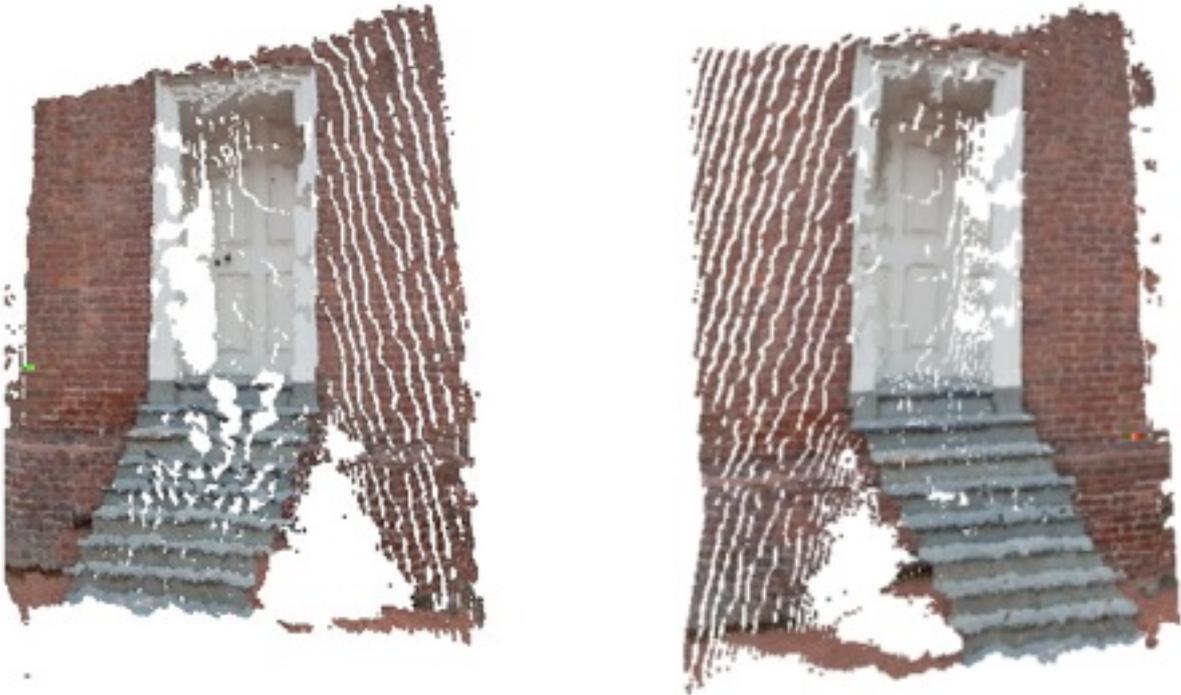


**Bottom image.** Here we show a 3D clip of what was digitized into 3D. We read many separate images and by motion an different angles we see target area from several angles.

Software calculates by new mathematics and from this it generates an real 3D model of what was viewed. Here we have a 3D coordinate in each pixel combined with the pixel color. Voxel data is then a 3D relative coordinate with a texture attribute.

By motion and larger videos we can in principle read very large objects and generate a real 3D drawing of these clips.

Output data can be added into a CAD 3 D file of standard formats. If someone want we can here make a 3D model in color in a stereo writer.



### **3D sequence in different angles**

Here we have made a video of a door and stair area. We looked at different angles at same area covering maybe about +- 45 degree in separation.

Each colored pixel have a real 3D coordinate with an extra information about color. This information can be used in several ways. One is to use it in a smart viewer where operator can decide where to look and from what point.

One other application is 3D digitizing where we generate a 3D CAD file. Here we get what was viewed into a 3D data base and can handle this information any way we want. Here we see applications all from Video games where we digitize areas and surroundings to production of models over objects and areas we scan. Example can be a photorealistic 3D model of Titanic.

In following pages we show the point of cloud of Titanic video clips and explain how they was created and how to understand them. Output in the cloud of points gives a transparent view where all voxels have a 3D coordinate and surface color as marker. Boat surface is rough and crowded by vegetation and debris so it is not a simple view in 3D to show in cloud of point ways.

This is not ideal for viewer but anyway we show what it looks like here.

Top view is 3D point of cloud shows some part on the deck of coordinate.

from up to down. Transparency the boat. Each point have a 3D

