

URBAN POINTCLOUD MODELS: 3D LASER SCANNING OF THE HISTORICAL CENTRE. TOSSA DEL MAR, CATALONIA

Pilar García Almirall
UPC. CPSV

Ernesto Redondo
UPC

Alejandro Marambio
UPC. CPSV

Alejandro.E.Marambio@upc.edu

The aim of the Scanning of Tossa de Mar in 2007 was the generation of high density pointcloud model of the historical centre to work as data bases for preservation purposes. Interactive high precision 3D model and 2D CAD facades and plans were generated from the collected 3D data. Laser scanning survey is discussed as a tool for the analysis of urban morphology. A global digital high precision 3d model allows the possibility to extract 2d and 3d data, the generation of facades or plans as ortho images, the evaluation of singularities, creation of urban itineraries etc.