



# FIG Working Week 2012

Rome, Italy 6–10 May

Knowing to:

Manage the territory  
Protect the environment  
Evaluate the cultural heritage



## LiDAR data integration for 3D Cadastre: some experiences from Brazil

Guilherme H. B. Souza  
Amilton Amorim, Brazil

Platinum sponsors:



esri



Trimble



# FIG Working Week 2012

Rome, Italy 6–10 May

Knowing to:

Manage the territory  
Protect the environment  
Evaluate the cultural heritage



## Problem

Lack of mapping;

Undefined cadastral model in Brazil (This fact is changing!)

How to do 3D Cadastre without reliable data?

How to use LiDAR data for the Cadastre in these conditions?

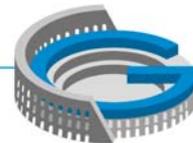
Platinum sponsors:



esri



Trimble





# FIG Working Week 2012

Rome, Italy 6–10 May

Knowing to:

Manage the territory  
Protect the environment  
Evaluate the cultural heritage



## Methodology

- Integration between TLD and ALD;
- Use of cylindrical model to classify the data;
- Generate a new cloud point with attributes;

Platinum sponsors:



# FIG Working Week 2012

Rome, Italy 6–10 May

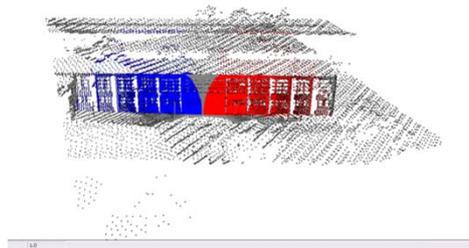
Knowing to:

Manage the territory  
Protect the environment  
Evaluate the cultural heritage



## Results

- Some results are very good



Platinum sponsors:





# FIG Working Week 2012

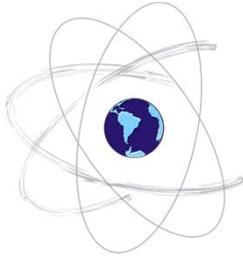
Rome, Italy 6–10 May

Knowing to:

Manage the territory  
Protect the environment  
Evaluate the cultural heritage



## Acknowledgments



Platinum sponsors:

