

Digital photogrammetry used for the 3D reconstruction of the walls around the acropolis of Titani (Greece)

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Introduction

- Monitoring and managing the site
- Photogrammetric documentation
- DEM – Orthophotomaps
- 3D reconstruction (CAD)



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Workflow

- Field work total station
 non-metric camera
- Photogrammetry VirtuoZo™ v3.3
 abs orientation < 1 cm
 editing procedure
- 3D reconstruction with orthophotos in CAD



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Coordinate transformation

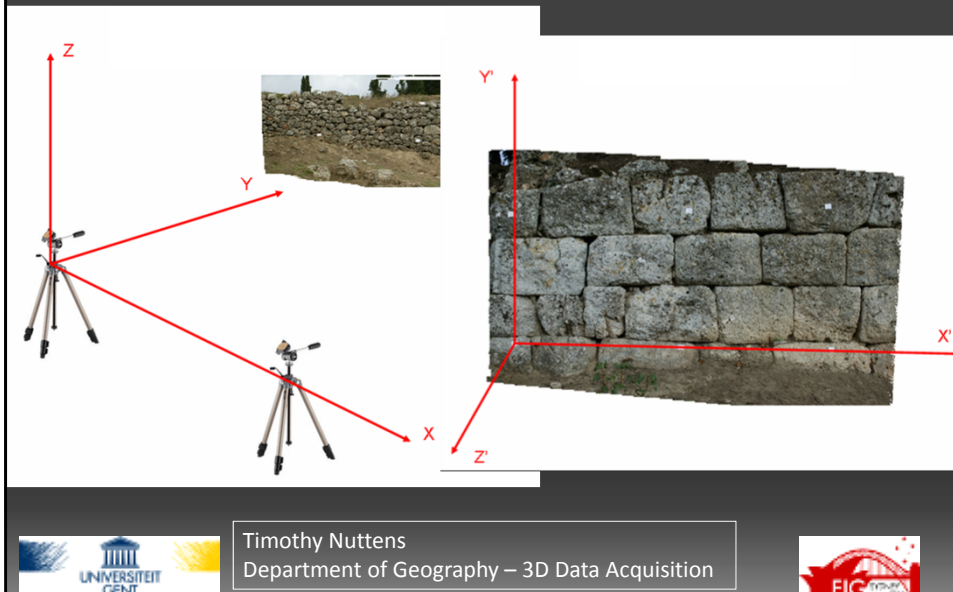
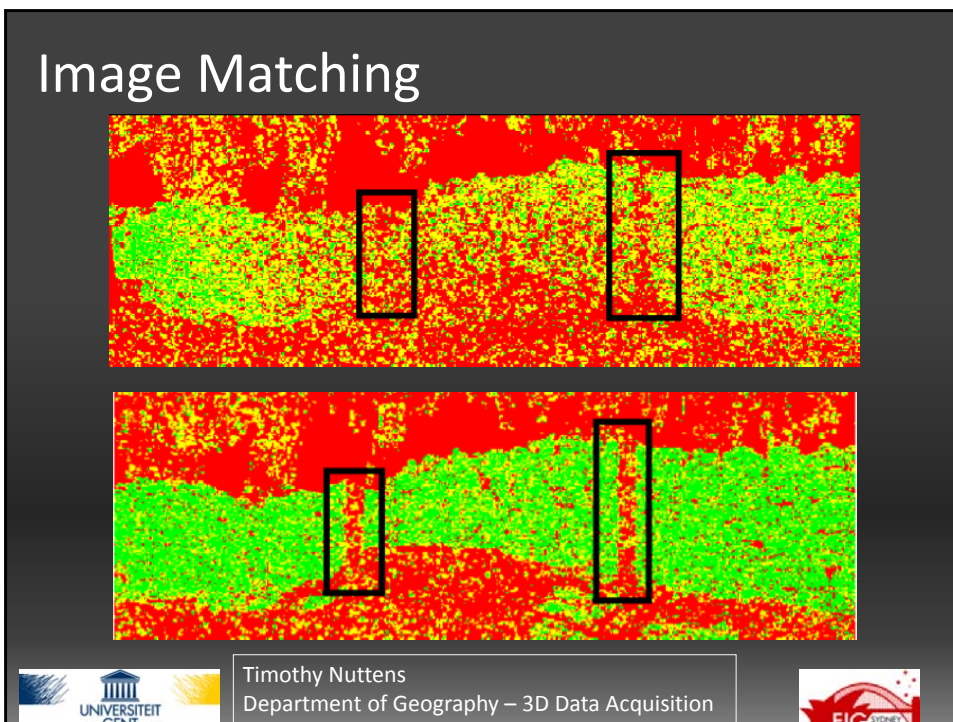


Image Matching



Editing procedure



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Editing procedure



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Virtual 3D reconstruction



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Virtual 3D reconstruction



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Conclusions

- Accurate metric documents
- Difficulties photogrammetric process
 - non-ideal recording points
 - insufficient contrast
 - scale differences
- Absolute orientation < 1 cm



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