

HeRMaP GAMBIA

Gambia, 2023

Dr. Cornelis Stal

HERITAGE

THE HERITAGE MANAGEMENT ORGANIZATION

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Co-funded by the European Union

NATIONAL COUNCIL FOR ARTS AND CULTURE NCAC

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Workshop overview

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Workshop

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Instructor



Dr. Cornelis Stal

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Program objectives

- Obtain specialized skills in digital tools for heritage management
- Support decision making processes based on spatial data and analytical processes
- Create, update, manage, publish, … spatial data

Focus on GIS and image-based 3D modeling (photogrammetry)

3D model as a virtual carrier for processes and phenomena



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Subjects

GIS (Geographic Information Systems):

- Introduction to GIS and GIS software
- Cartography
- Creating or obtaining data in various ways
- More advances applications and challenges

Image-based 3D modeling:

- Introduction to photography, photogrammetry, 3D modeling
- 3D modeling software
- Model publishing
- Data acquisition



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Approach

- Lectures with notes
- Live demos
- Hands on assignments
- General and individual support
- On site data acquisition (terrestrial + airborne)
- Fieldwork



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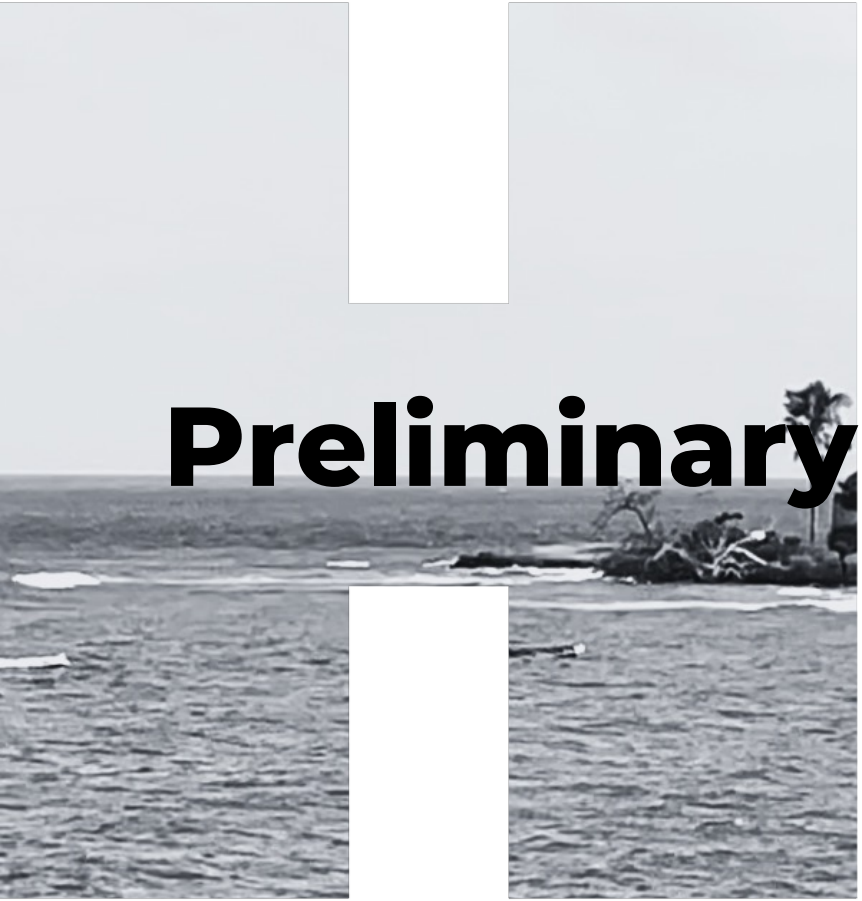

Preliminary results

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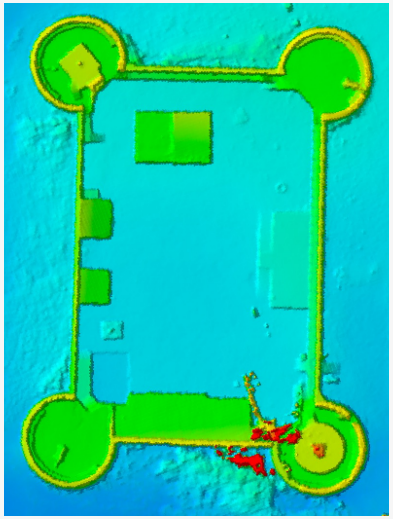
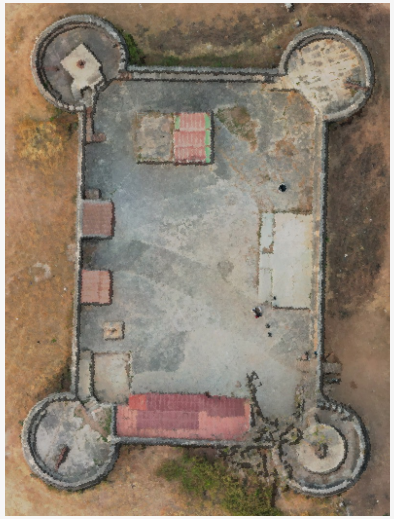
Overview





Maps (DEM+orthophotos)

3D models

- Simple interactive viewers
- Model with markers, tour, information, …
- AR

Focus: Fort Bullen + Kunta Kinteh Island

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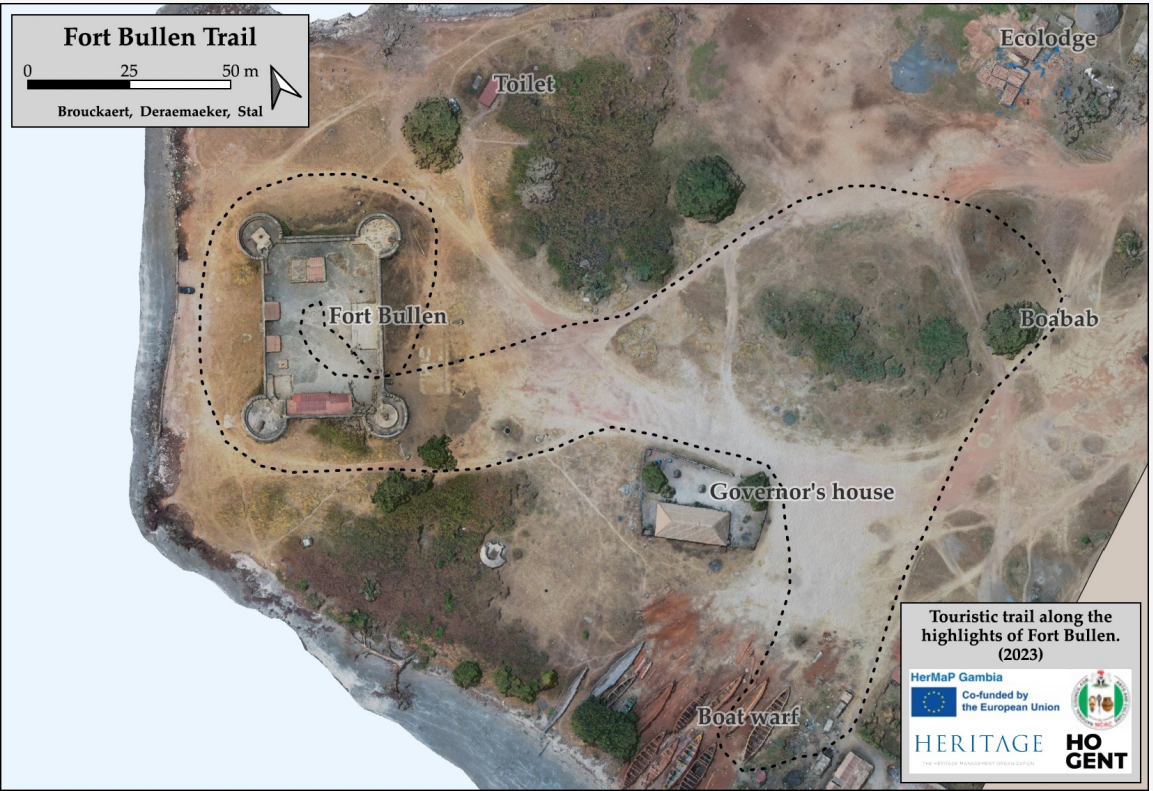
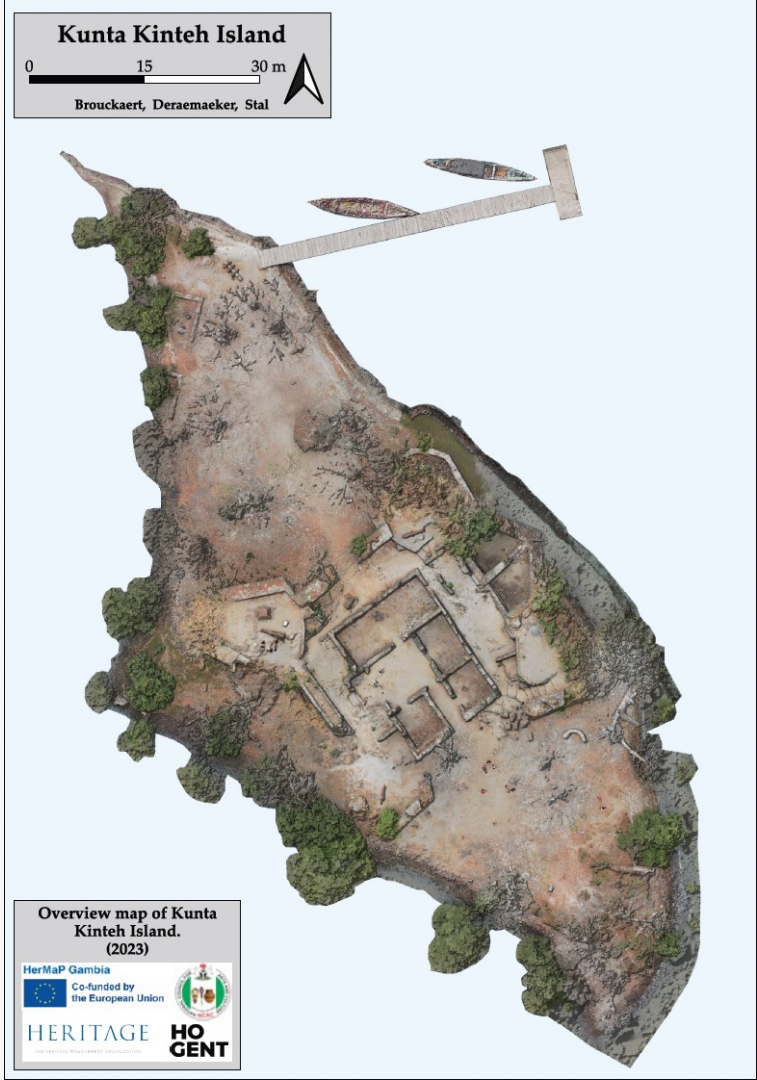
Preliminary results

Maps





Simple interactive viewers





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Model with markers, tour, information, ...





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AR

Pilot ready for Fort Bullen only

Augmented reality: project 3D model on pre-trained image





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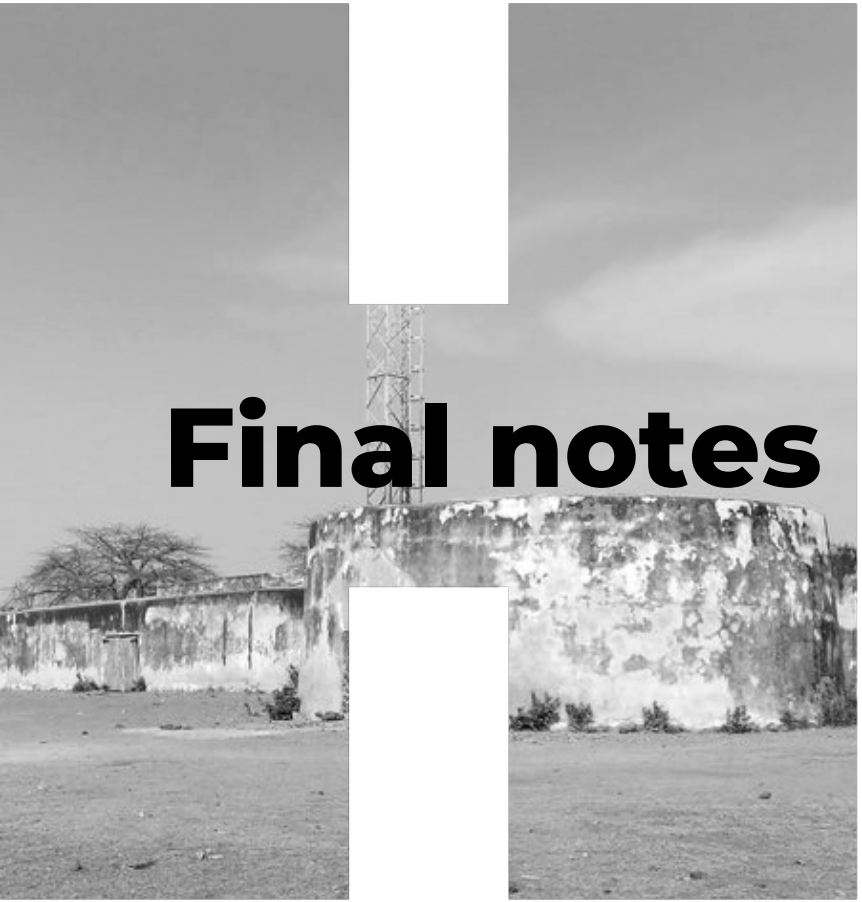

Final notes

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Requirements and further steps

- Consolidating knowledge and skills
  - Publishing course material and other resources
  - Inspire participants to share 3D modeling and GIS experience
  - Building Digital Tools community
- Online gathering of interdisciplinary experts
- Further steps with the data and deliverables
- Continue support and extend partnership
- Serious gaming, data hub, …
- …

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Thank you!

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