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*Session 37. Projets archéologiques de WebSIG et WebGL. L'avenir des interactions entre bases de données, nuages de points, fouilles et mobilier of pour une meilleure compréhension des espaces habités.*

## SITAR: Linking inhabited spaces of ancient Rome, the Archeositar project experiences.

M. Serlorenzi, F. Santi, G. Leoni (SSABAP – Roma)  
M. Fadda, C. Fanelli, F. Lamonaca, C. Livrini, S. Picciola,  
C. Rosa, P. Rosati, F. Sommaini, S. Valentini, A. Vecchione (SITAR)

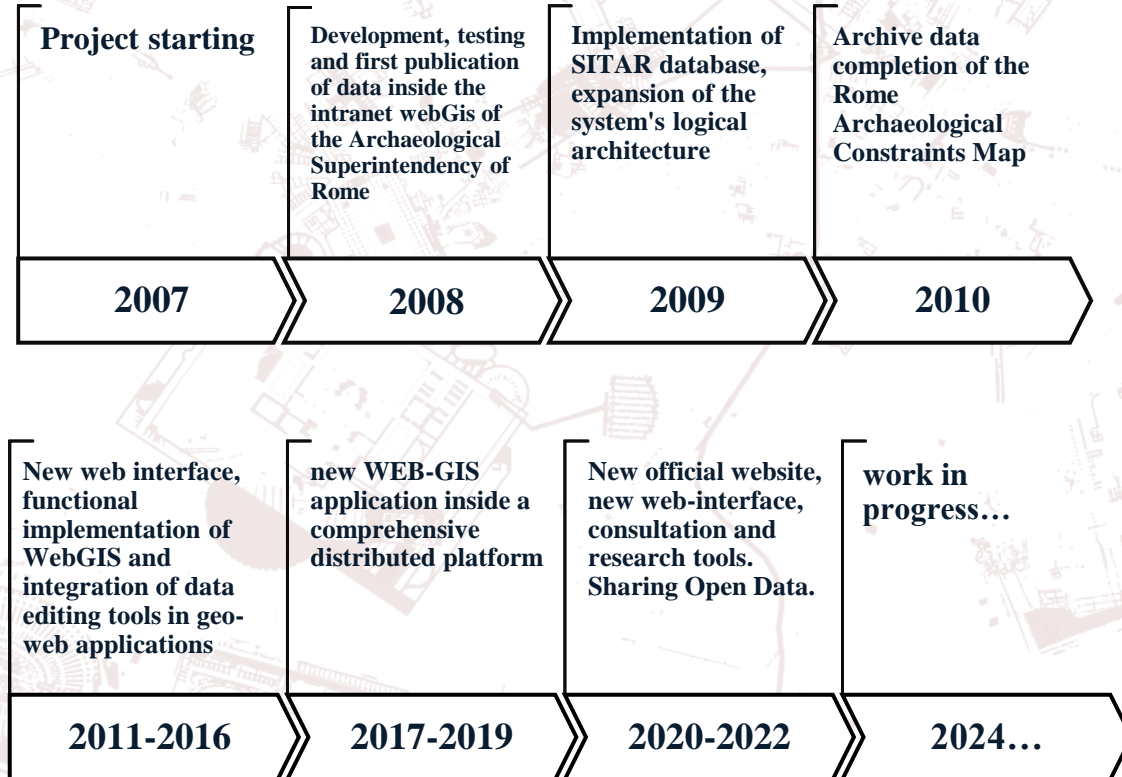
# SITAR:What are we talking about

Scan the code



[www.archeositarprom.it](http://www.archeositarprom.it)

## SITAR started in 2007



**QUALITATIVE  
APPROACH**

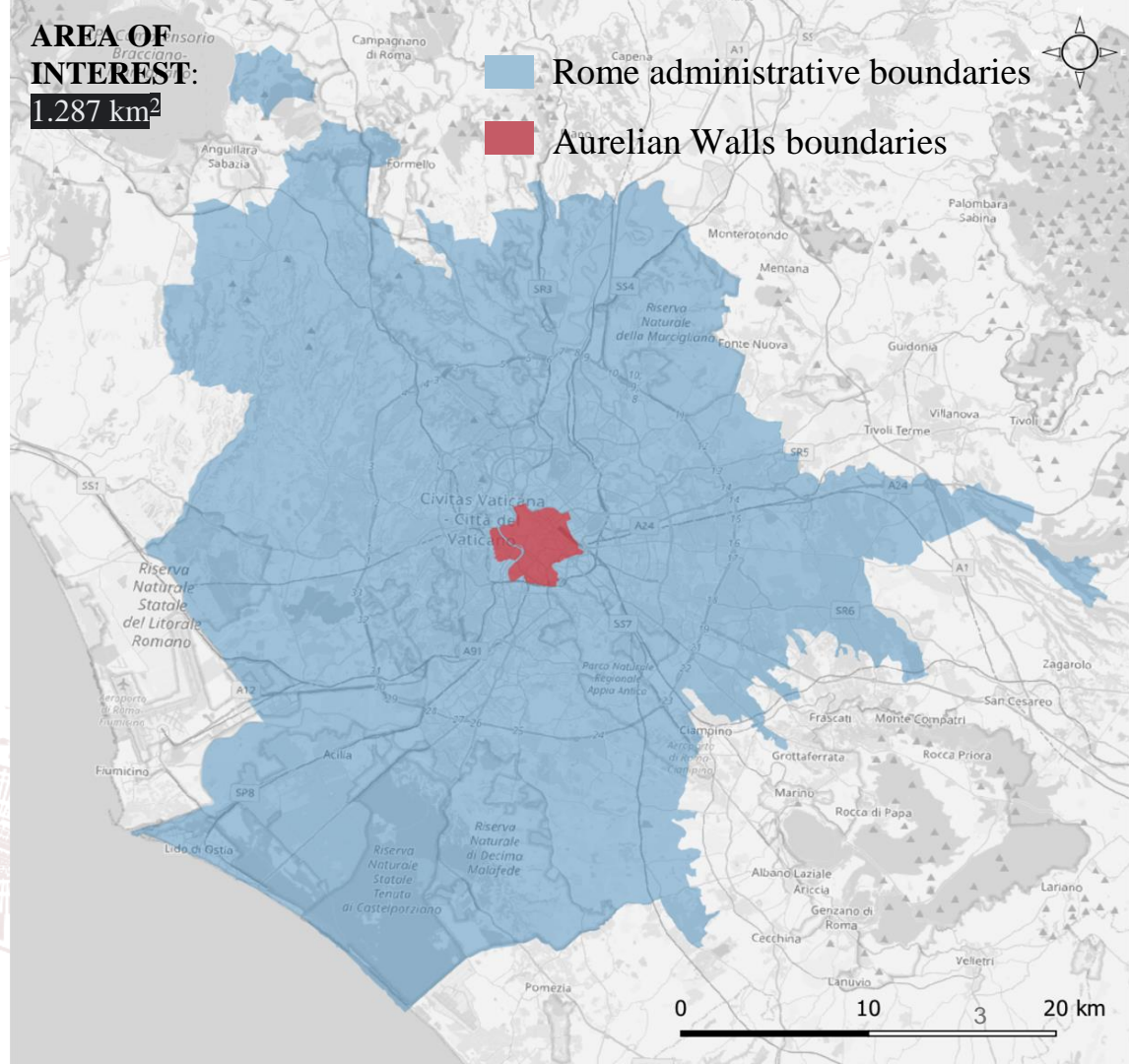
**ARCHAEOLOGICAL  
POTENTIAL**

**QUANTITATIVE  
APPROACH**

**AREA OF  
INTEREST:**  
**1.287 km<sup>2</sup>**

 Rome administrative boundaries

 Aurelian Walls boundaries

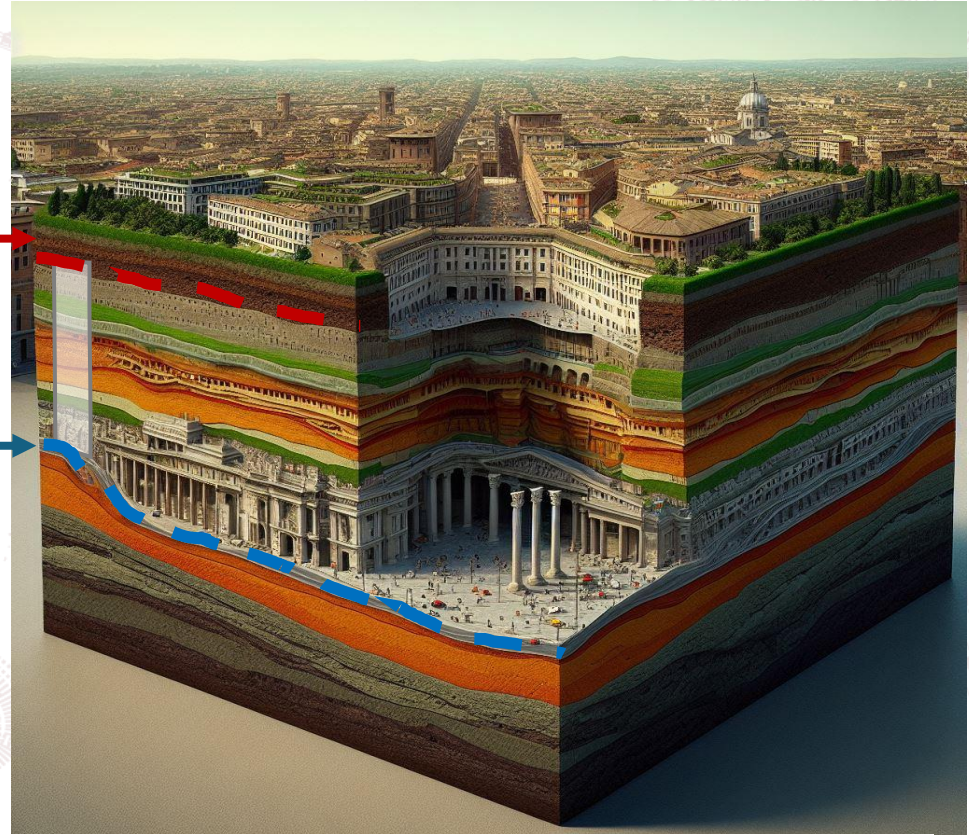


# QUANTITATIVE APPROACH: DEFINING TOP AND BOTTOM LAYERS

**CURRENT SURFACE**

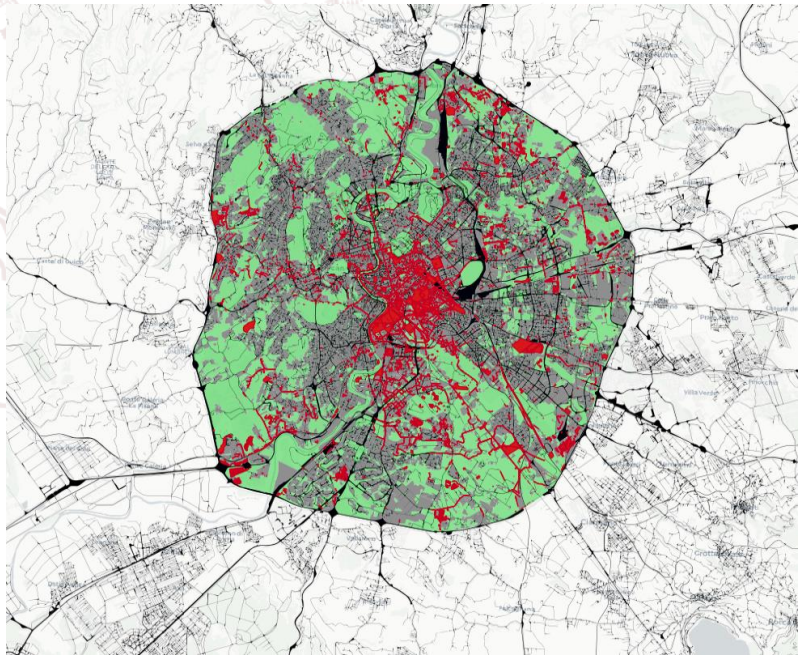


**GEOLOGICAL MODIFIED SURFACE**



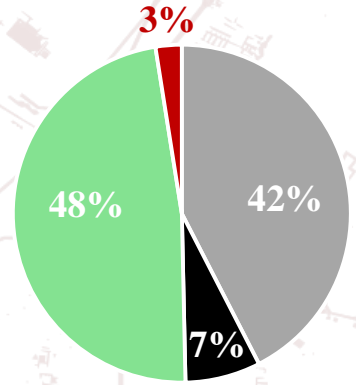
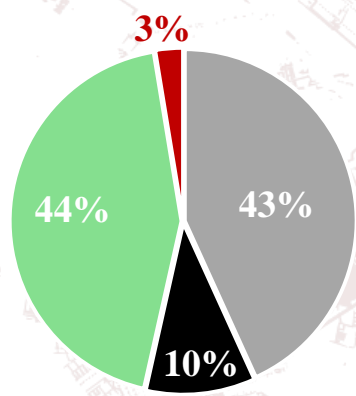
source: image created with Artificial Intelligence process

# How much have we documented?

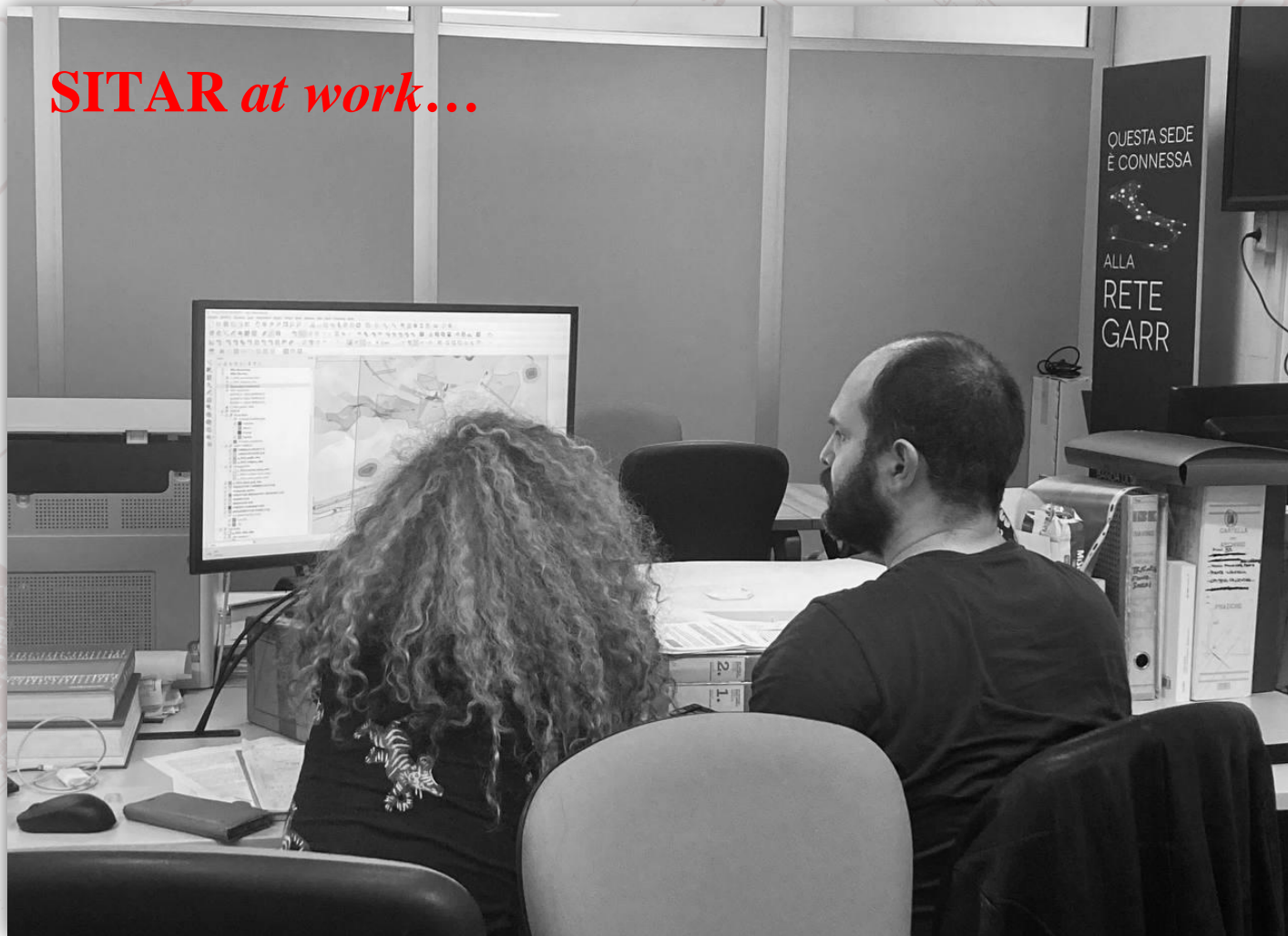


source: Copernicus – URBAN ATLAS 2018 Roma

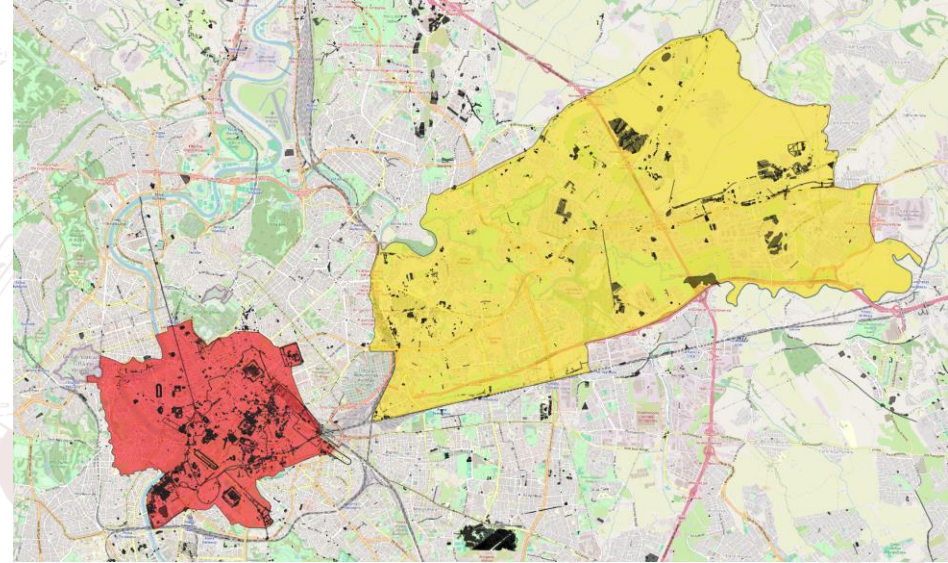
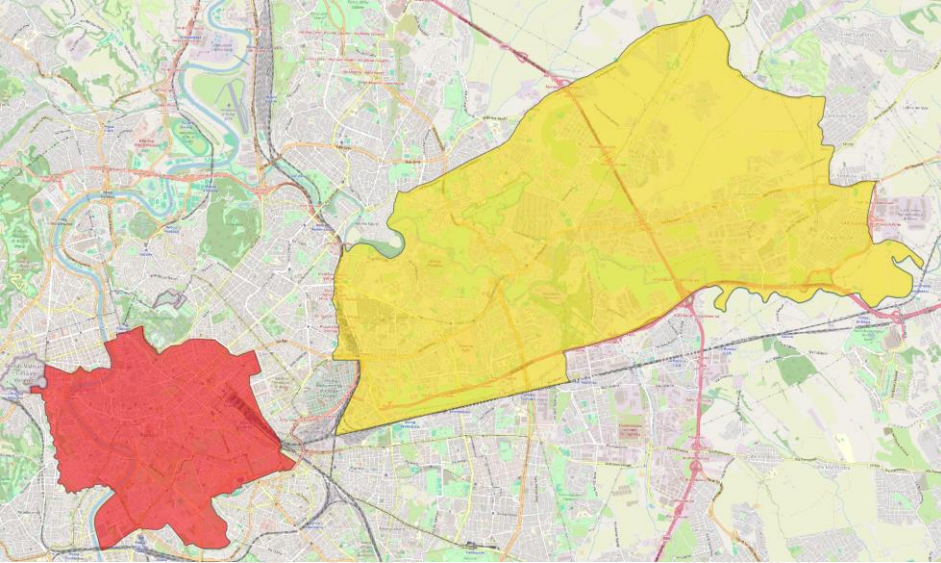
- Built areas
- Non-built areas
- Road network
- SITAR DATA

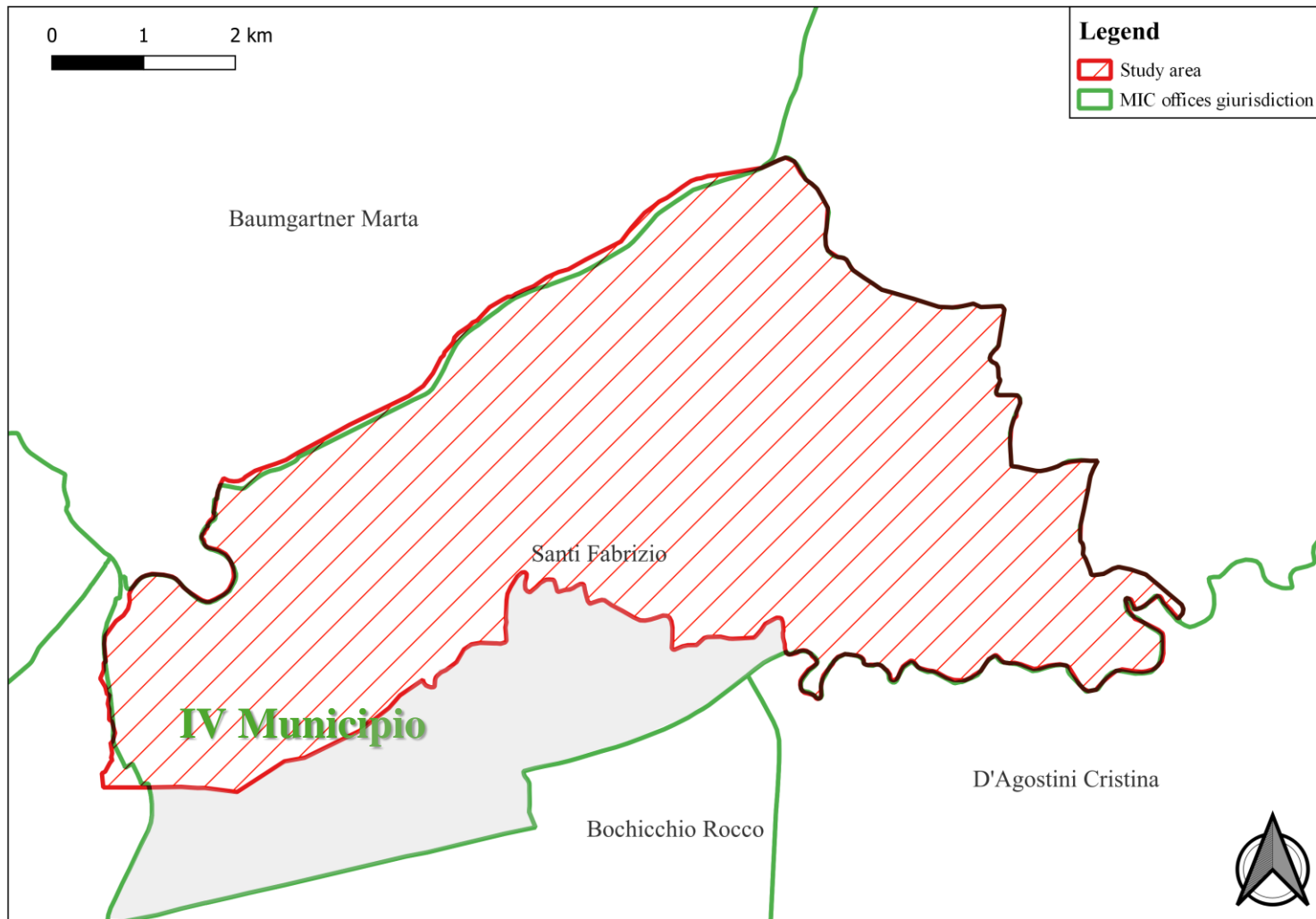


**SITAR at work...**



## «IV MUNICIPIO», ROME: THE EASTERN SUBURB







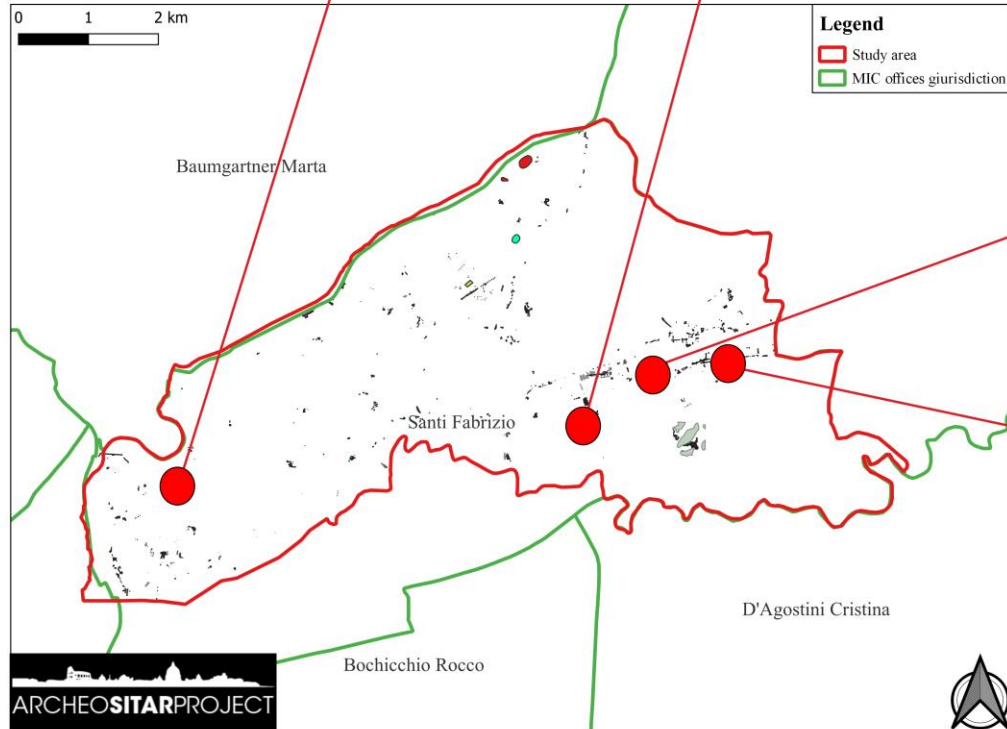
1. Caius Fufidius Asiaticus' Villa



2. Villa in Via Carciano



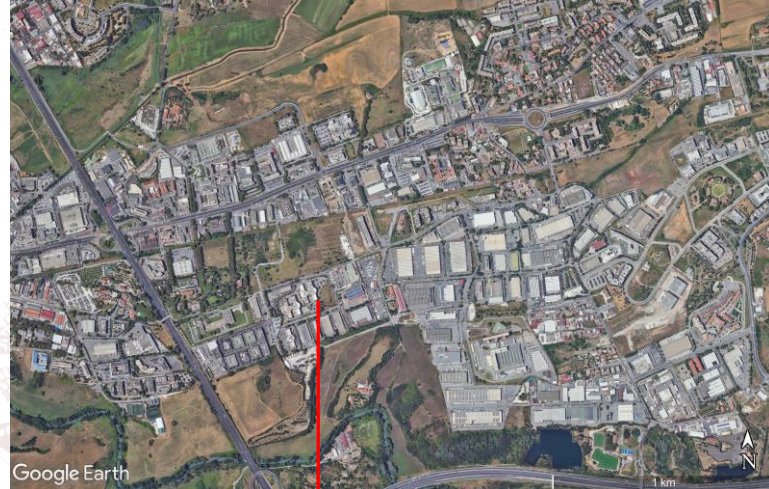
3. Tuff cave in the Caius Fufidius Asiaticus' Villa

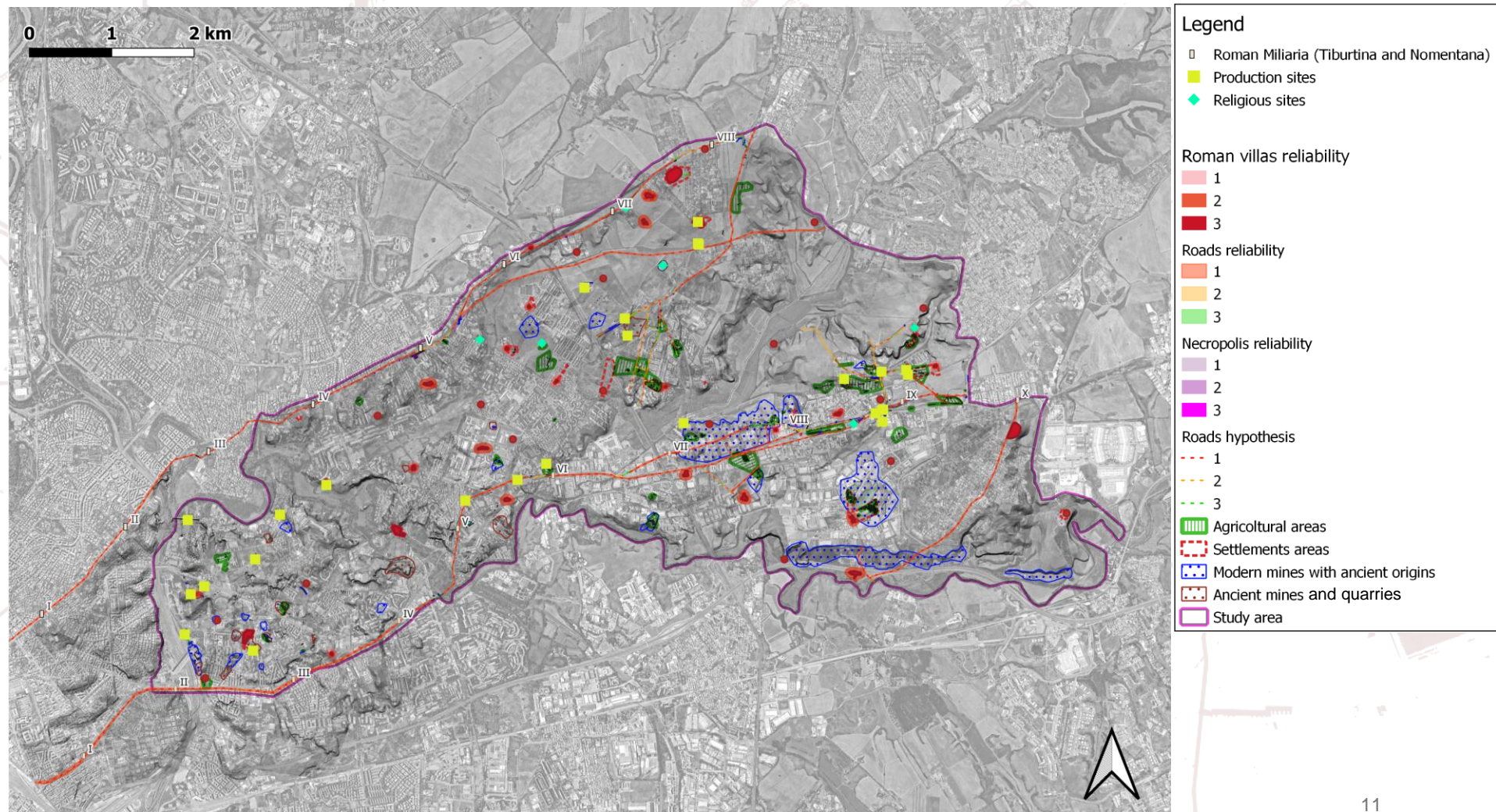


4. Saint Sinforosa Church excavation, along the Via Tiburtina



5. Paved surface of the Via Tiburtina, Settecami (Rome)





# ANALYSING AND DIGITALIZING HISTORICAL CARTOGRAPHY



IGM 1872



PTRS 1924



PRG 1908

0 1 2 km



**Legend**

- Roman Millaria (Tiburtina and Nomentana)
- Production sites
- Religious sites

**Roman villas reliability**

- 1
- 2
- 3

**Roads reliability**

- 1
- 2
- 3

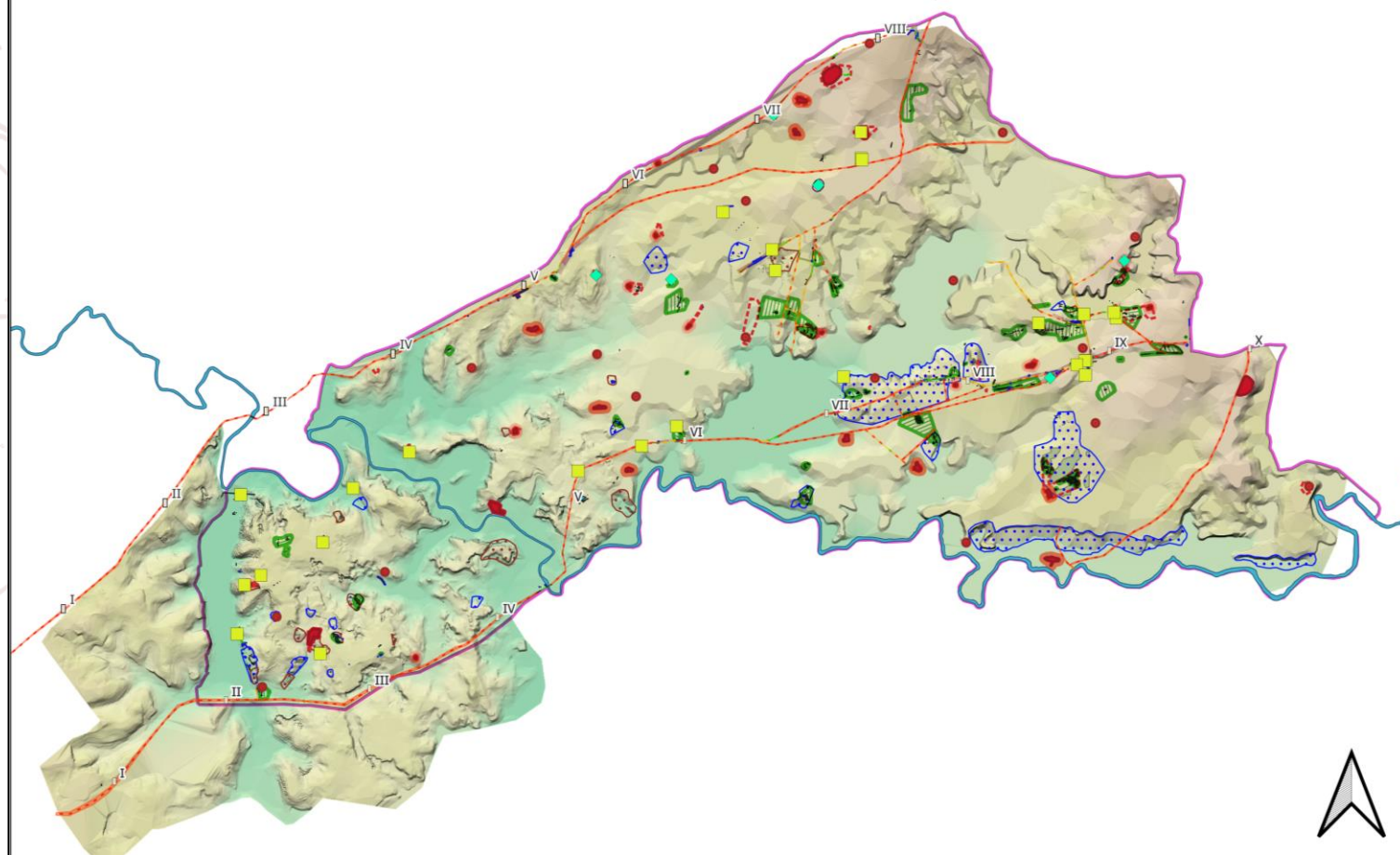
**Necropolis reliability**

- 1
- 2
- 3

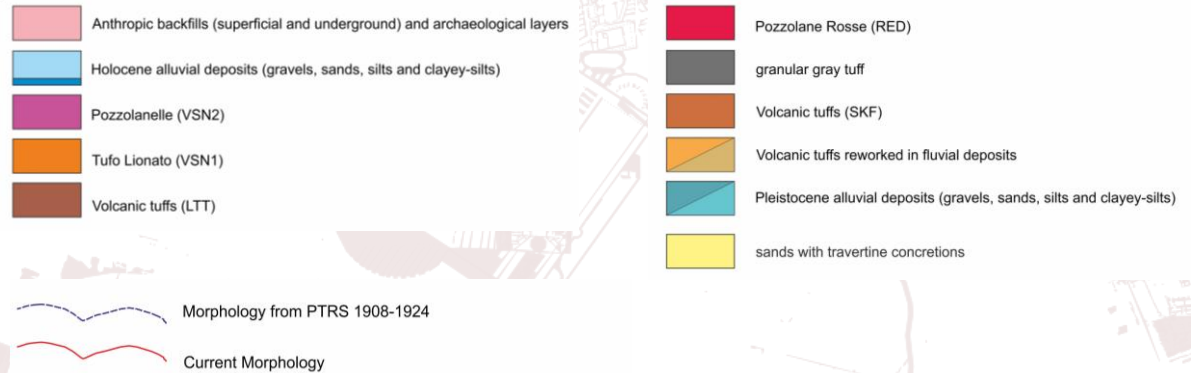
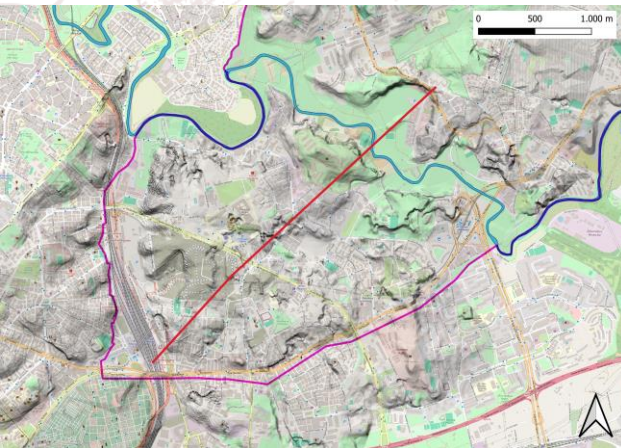
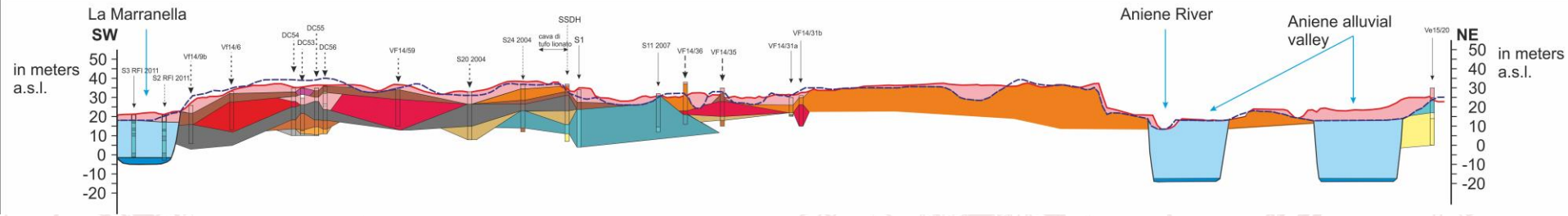
**Roads hypothesis**

- 1
- 2
- 3

- Agricultural areas
- Settlements areas
- Modern mines with ancient origins
- Ancient mines and quarries
- Study area



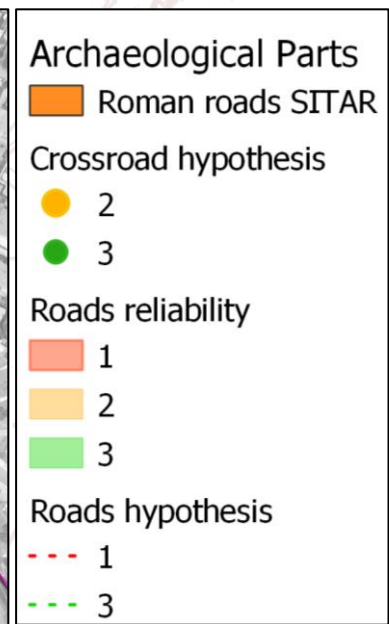
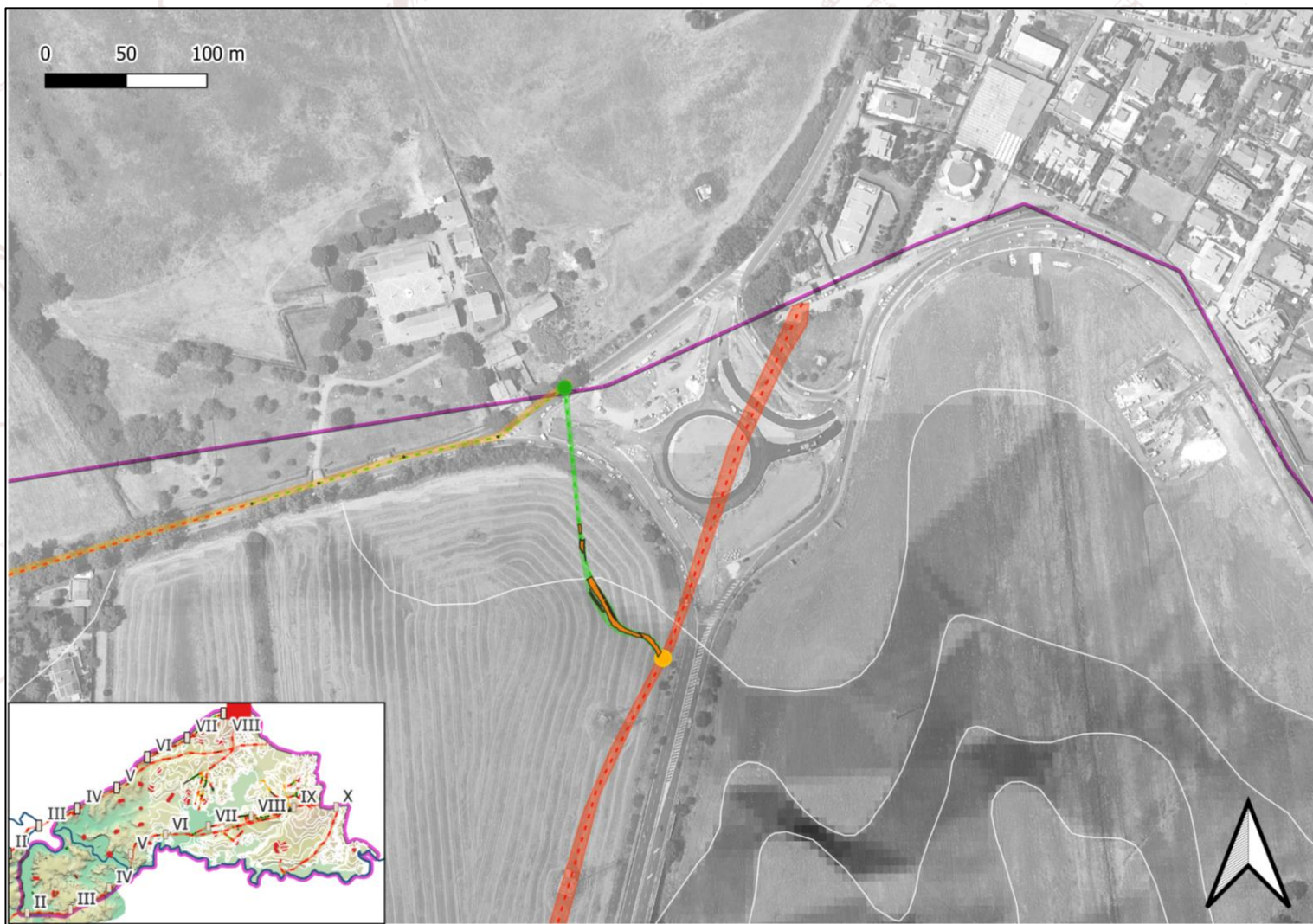
# GEOLOGICAL SECTION



## CATEGORIZING THE ARCHAEOLOGICAL PARTS (PA)

- **Roads** (113 PA = 43 contexts)
- **Funerary parts** (112 PA = 51 contexts)
- **Residential parts** (65 PA = 38 contexts)
- **Agricultural parts** (116 PA = 75 contexts), **productive parts** (36 PA = 26 contexts) e **mines and quarries** (71 PA = 65 contexts)
- **Public** (12 PA = 4 contexts) and **sacred** (15 PA = 7 contexts) **buildings**







## Archaeological Parts

Orange Roman roads SITAR

### Roads reliability

1

2

3

### Roads hypothesis

1

2

3

### Necropoli reliability

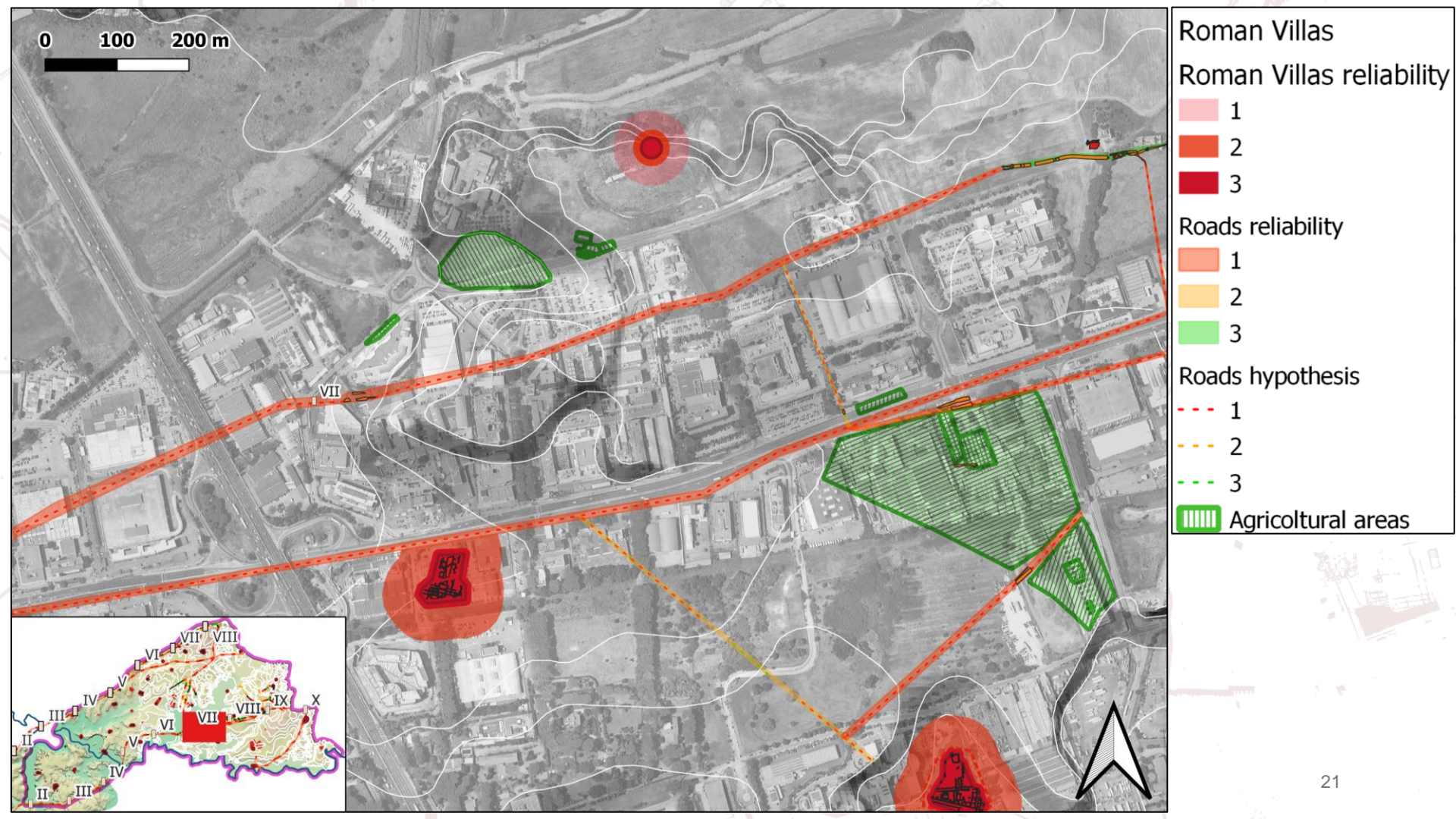
1

2

3







Roman Villas

Roman Villas reliability

1

2

3

Roads reliability

1

2

3

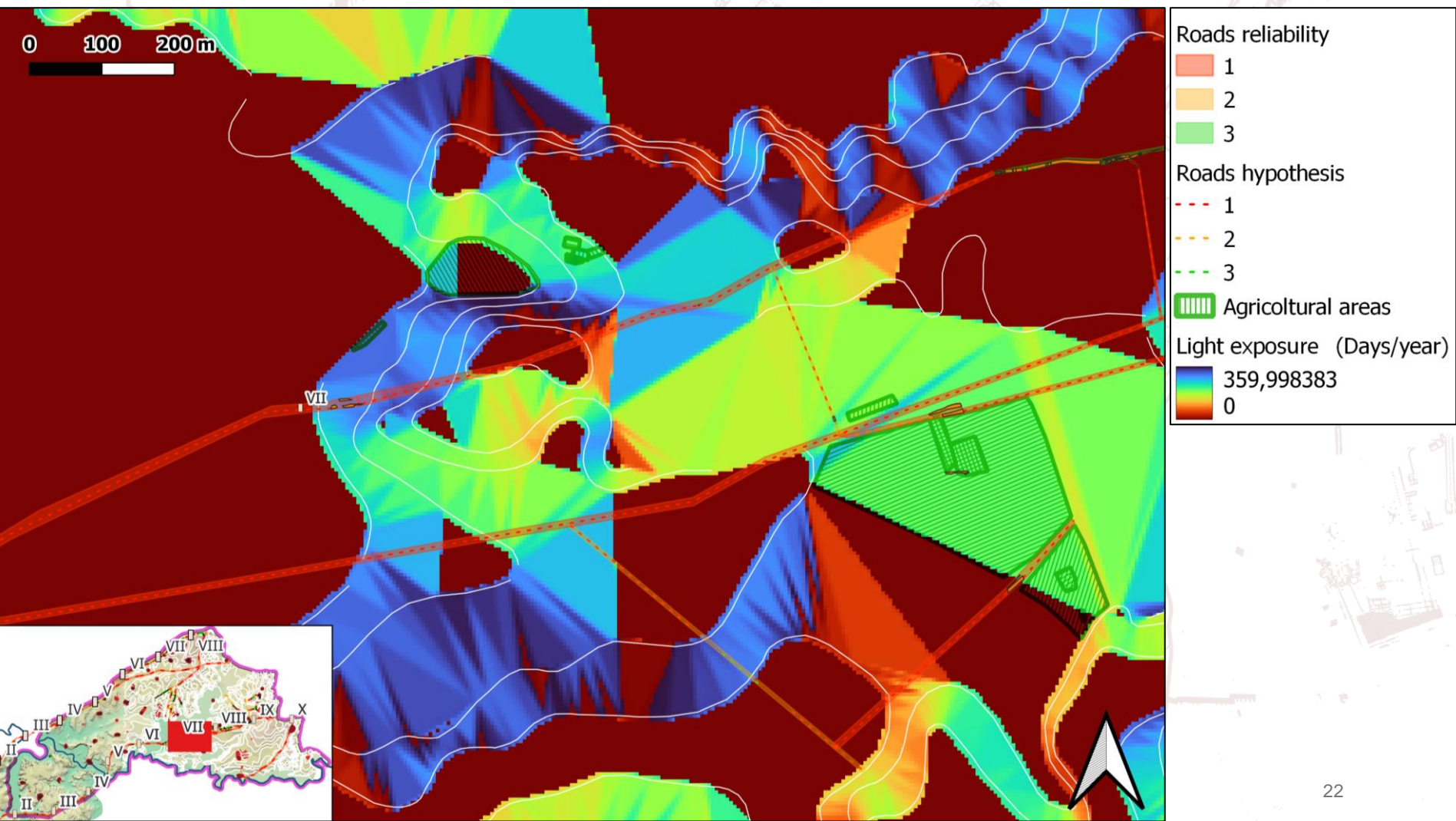
Roads hypothesis

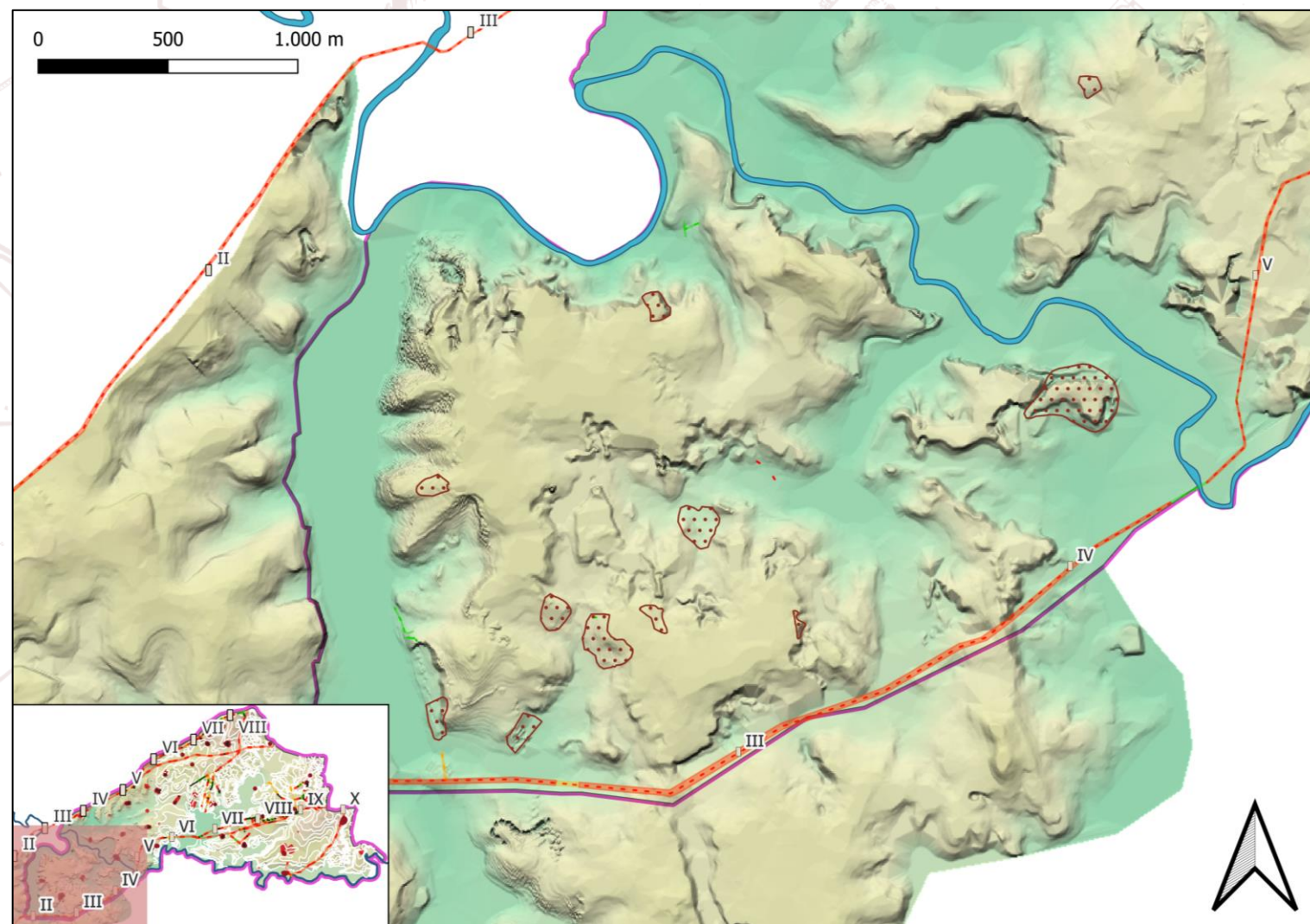
1

2

3


Agricultural areas





## Archaeological Parts

### Mines and Quarries

 Ancient mines and quarries

### Roads reliability

 1

 2

 3

### Roads hypothesis

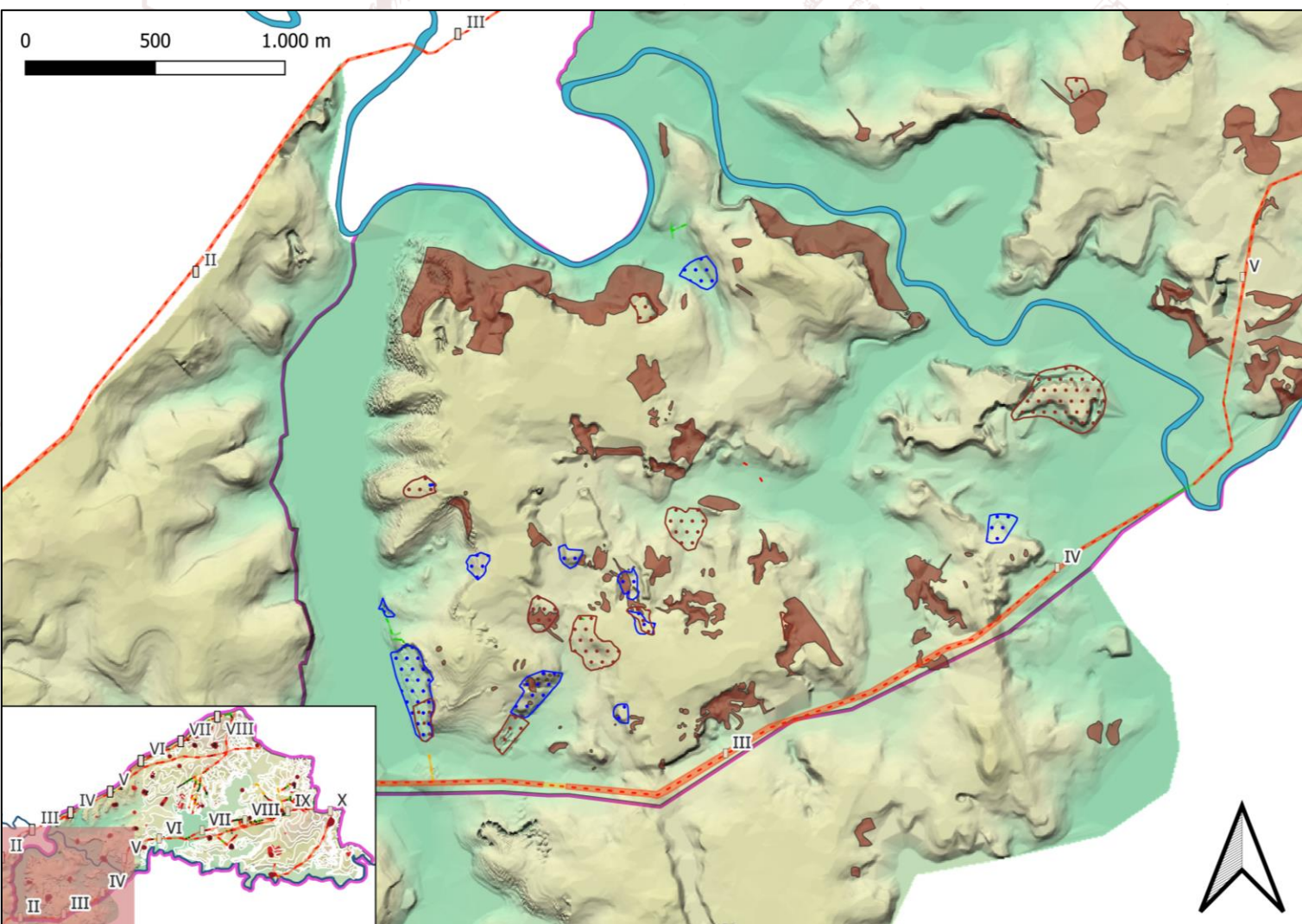
 1

 2

 3




 Aniène river





## Archaeological Parts





### Mines and Quarries

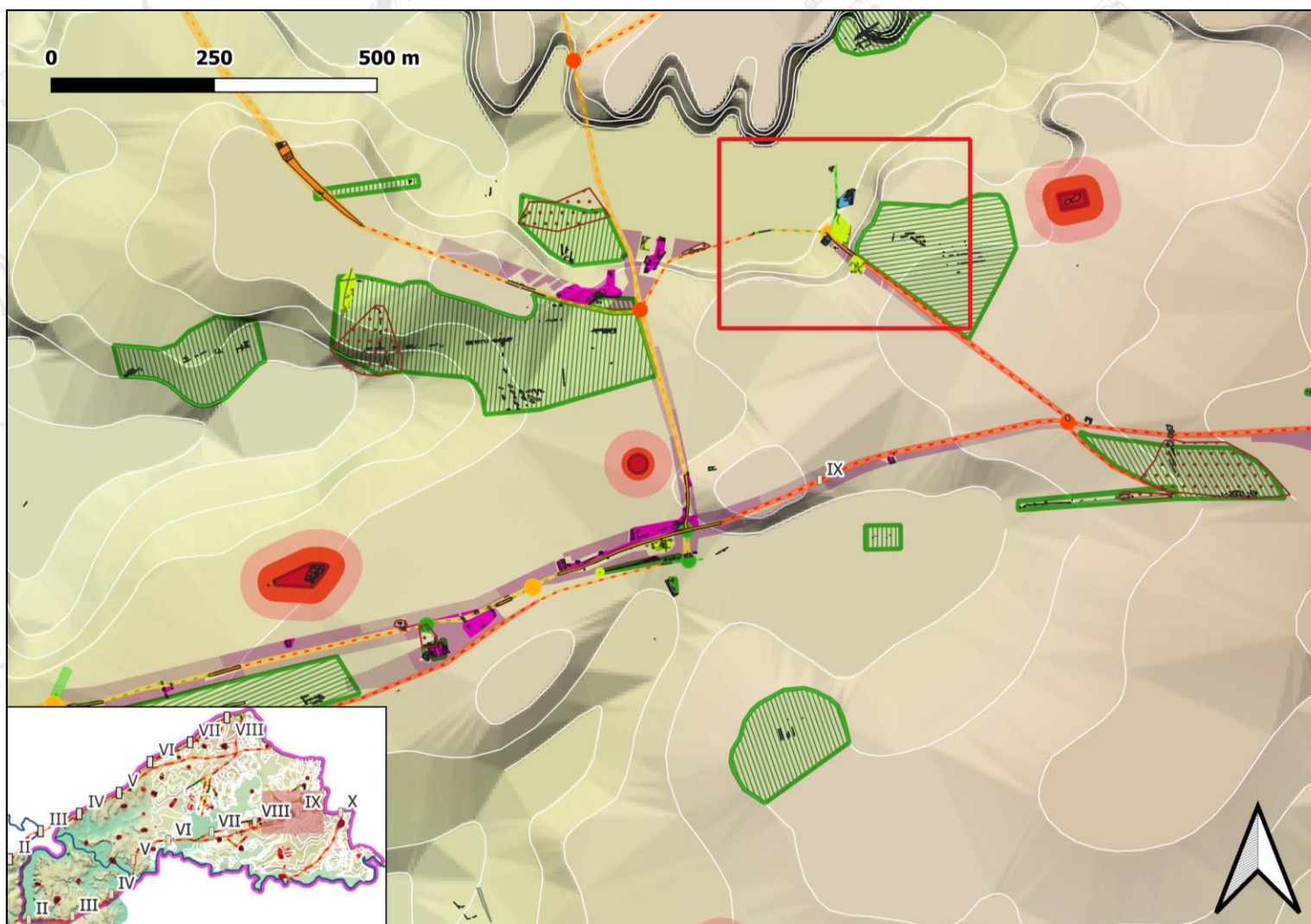
-  Ancient mines and quarries
-  Modern mines and quarries
-  Mines and quarries (1924)

### Roads reliability

-  1
-  2
-  3

### Roads hypothesis

-  1
-  2
-  3
-  Aniene river



## Archaeological Parts

### Buildings

- Religious buildings
- Public buildings
- Production buildings
- Agricultural areas

### Mines and quarries

- Ancient mines and quarries

### Roman Villas

### Roman Villas reliability

- 1
- 2
- 3

### Crossroad hypothesis

- 1
- 2
- 3

### Roads reliability

- 1
- 2
- 3

### Roads hypothesis

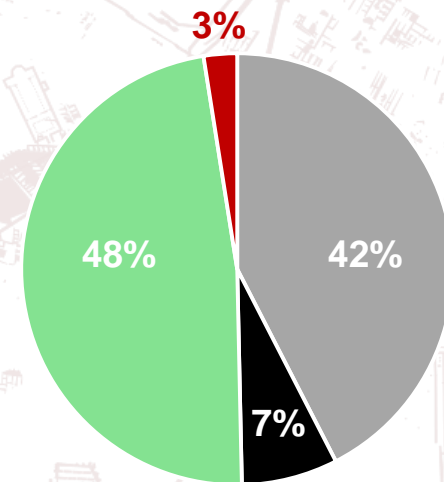
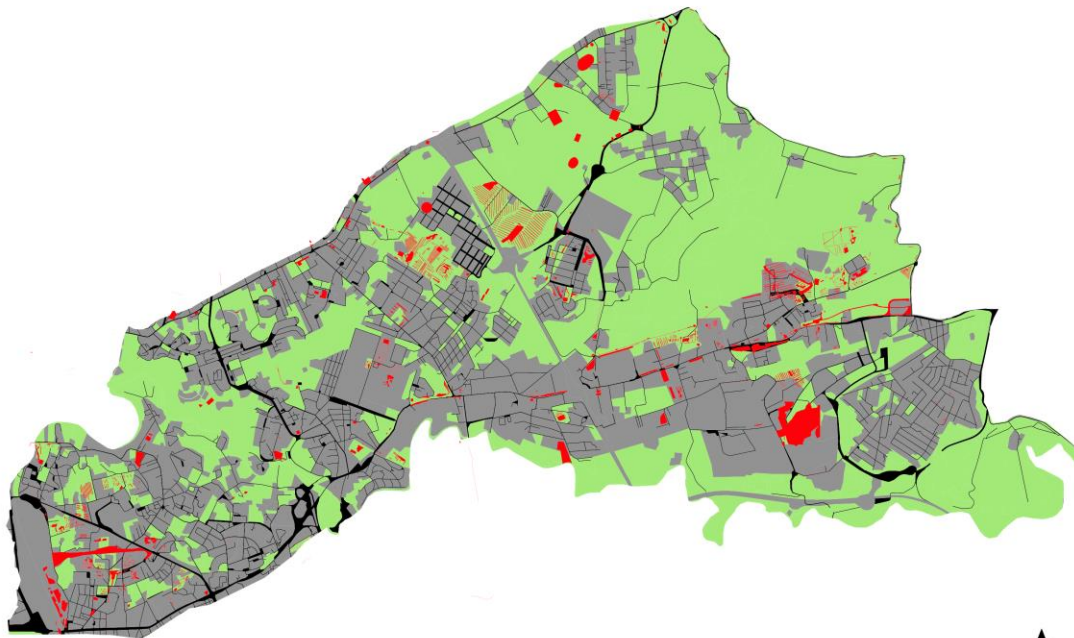
- 1
- 2
- 3



- Archaeological Parts
- Buildings
- Public buildings
  - Production buildings
  - Agricultural areas
- Roman Villas
- Roman Villas reliability
- 1
  - 2
- Crossroad hypothesis
- 2
- Roads reliability
- 1
  - 2
  - 3
- Roads hypothesis
- 1
  - 3

# HOW MUCH HAVE WE DOCUMENTED?

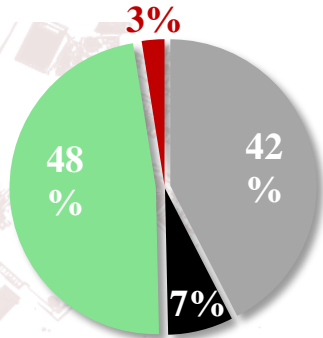
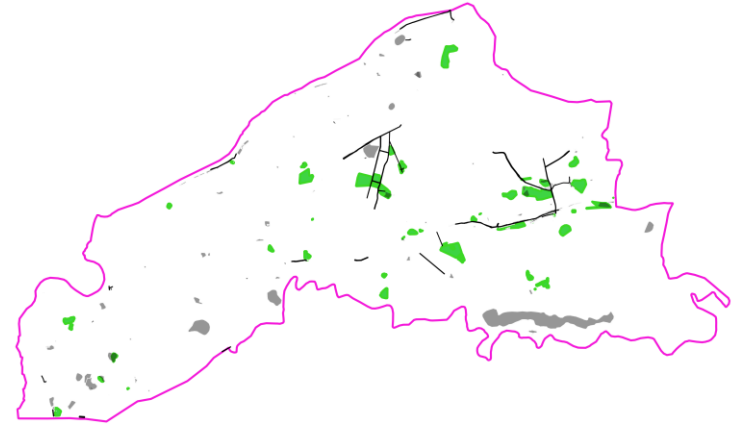
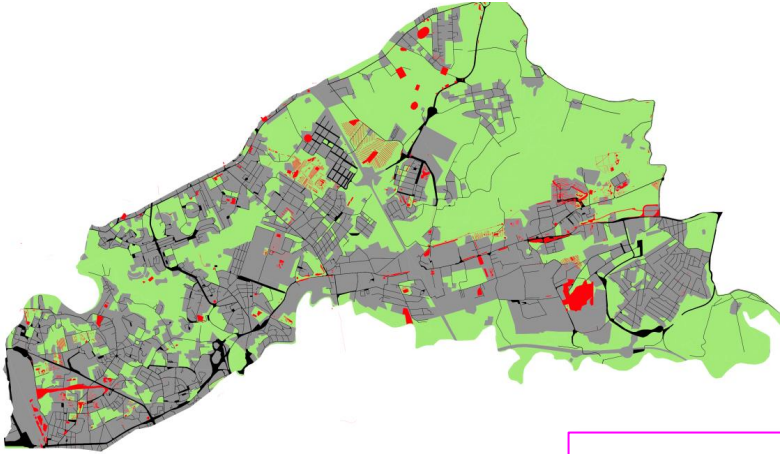
0 1 2 km



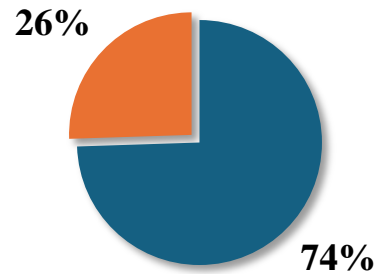
- Built areas
- Non-built areas
- Road network
- SITAR DATA

# NEW AND “ANCIENT” COPERNICUS

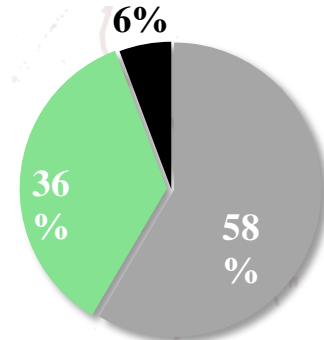
0 1 2 km



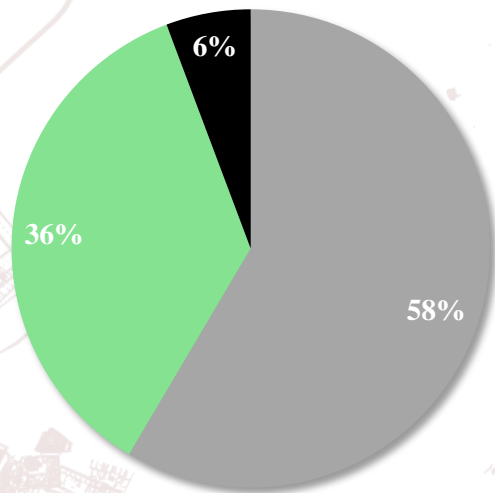
Similar areas SITAR/Copernicus



■ Similar between SITAR and Copernicus

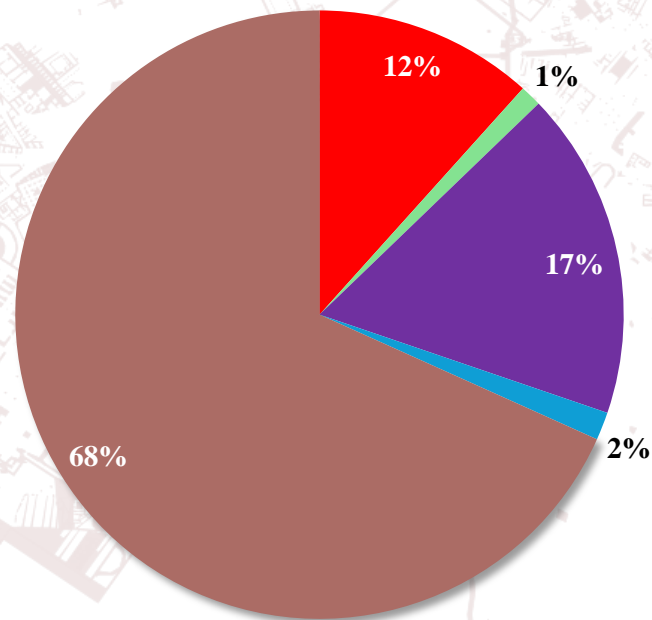


## Ancient landscape coverages



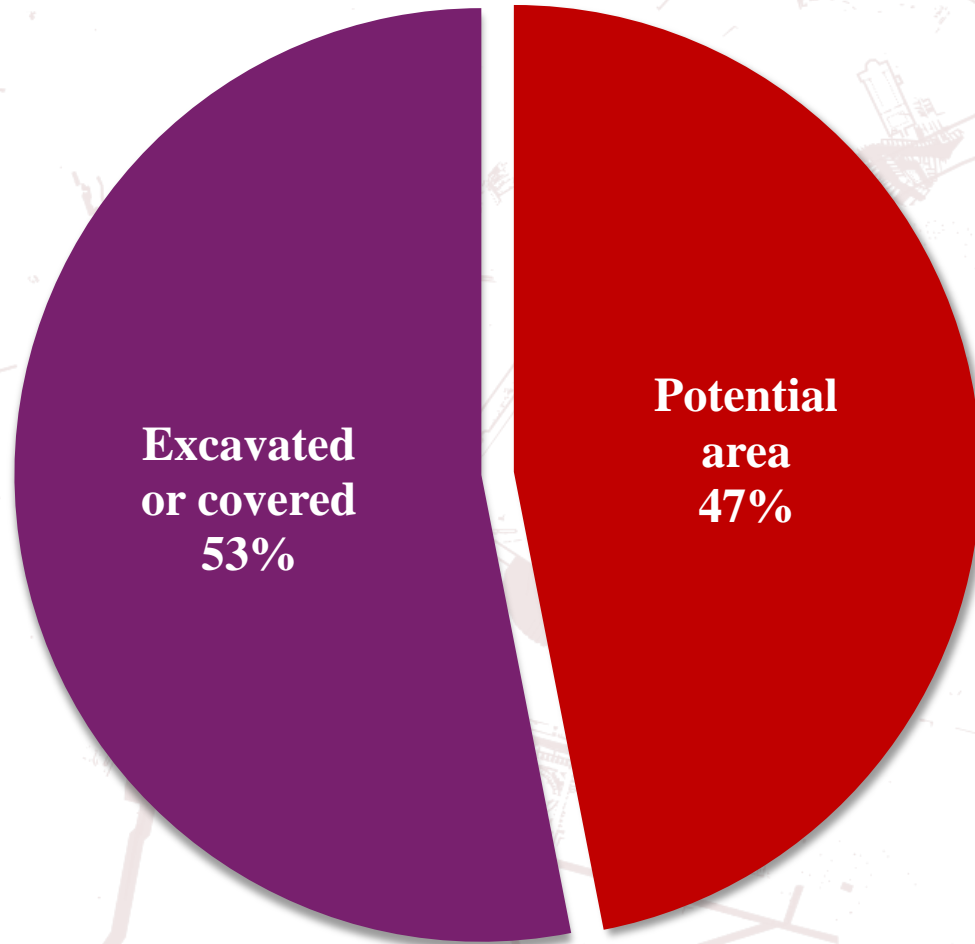
■ Built area ■ Non built area ■ Road Network

## Built areas typologies



■ Villae ■ Productive ■ Necropolis ■ Religious/Public ■ Ancient mines and quarries

# How much is left to investigate?





**THANK YOU!**  
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