



**DAI DATI SITAR ALL'INTERPRETAZIONE
NUOVI APPROCCI METODOLOGICI PER
LA LETTURA DEL PAESAGGIO
INSEDIATIVO SUBURABANO DI ROMA**

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Catasto Gregoriano, Agro Romano, mappa 164 georiferita su immagine da satellite con software QGIS. Elab. B.E. Borg, F. D'Andrea.
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**SOPRINTENDENZA SPECIALE
DI ROMA**
ARCHEOLOGIA BELLE ARTI PAESAGGIO

ARCHEOSITARPROJECT

**28-29 GIUGNO
2024**
ore 10.00

**LA TOPOGRAFIA SOCIALE DI
ROMA E DEL SUO SUBURBIO**
Nuovi approcci

SITAR TEAM



SITAR: main institutional goals

to **OVERCOME** years of **delay** in standardization processes for archaeological data management of the Superintendence

to **SIMPLIFY** management/administrative framework in order to enhance processes related to the protection and promotion of Cultural Heritage

to **BUILD** a flexible and dynamic tool that can be expanded and modified, according to new needs

to **TAKE ADVANTAGE** of previous experiences within the Superintendence and other institutions with already acquired and available data

to **OFFER** an online open-data webgis tool for sharing archaeological data of Rome



to **PROVIDE** new tools in order to better inform and influence a responsible urban and landscape planning

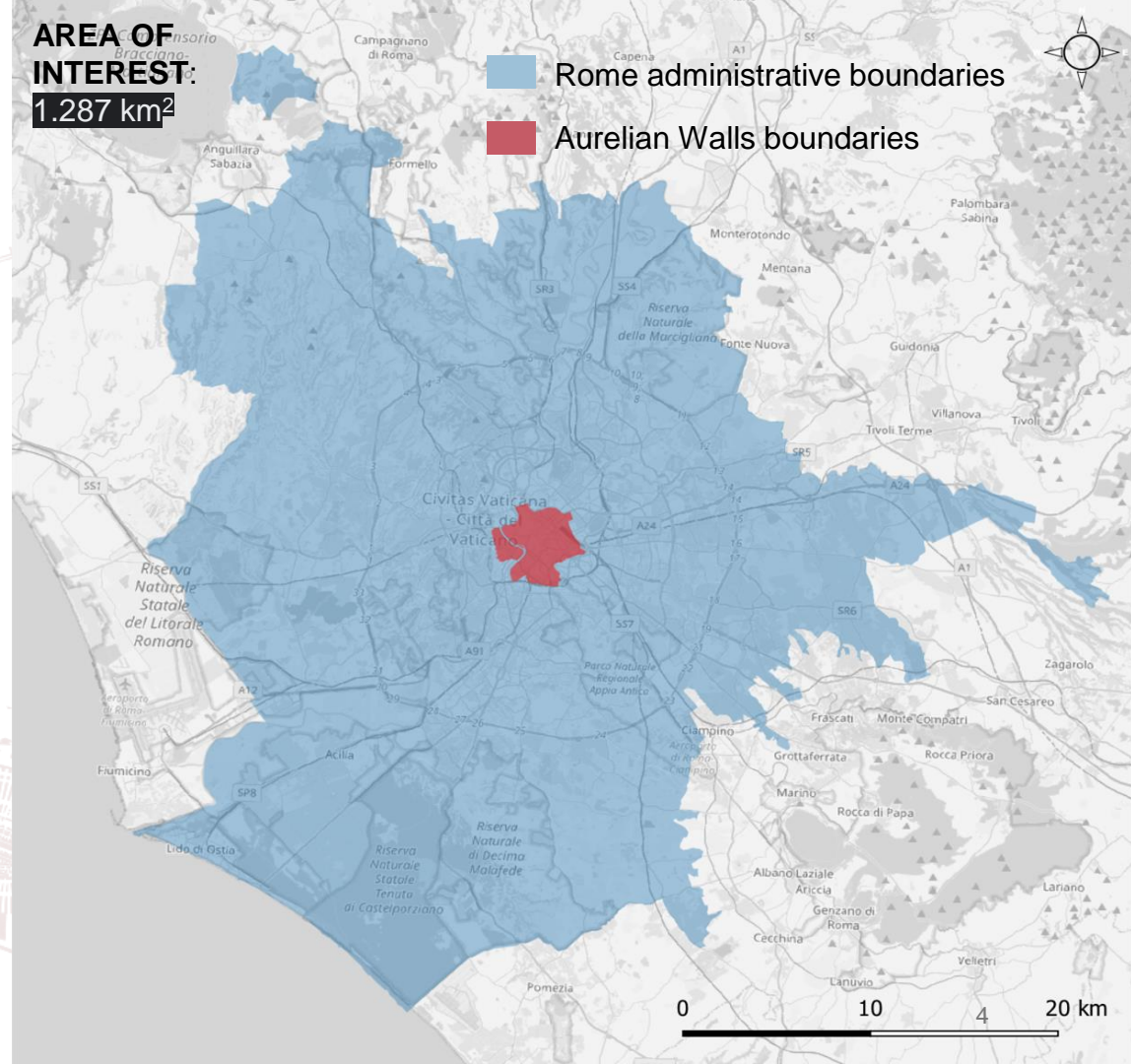
**QUALITATIVE
APPROACH**

**ARCHAEOLOGICAL
POTENTIAL**

**QUANTITATIVE
APPROACH**

**AREA OF
INTEREST:**
1.287 km²

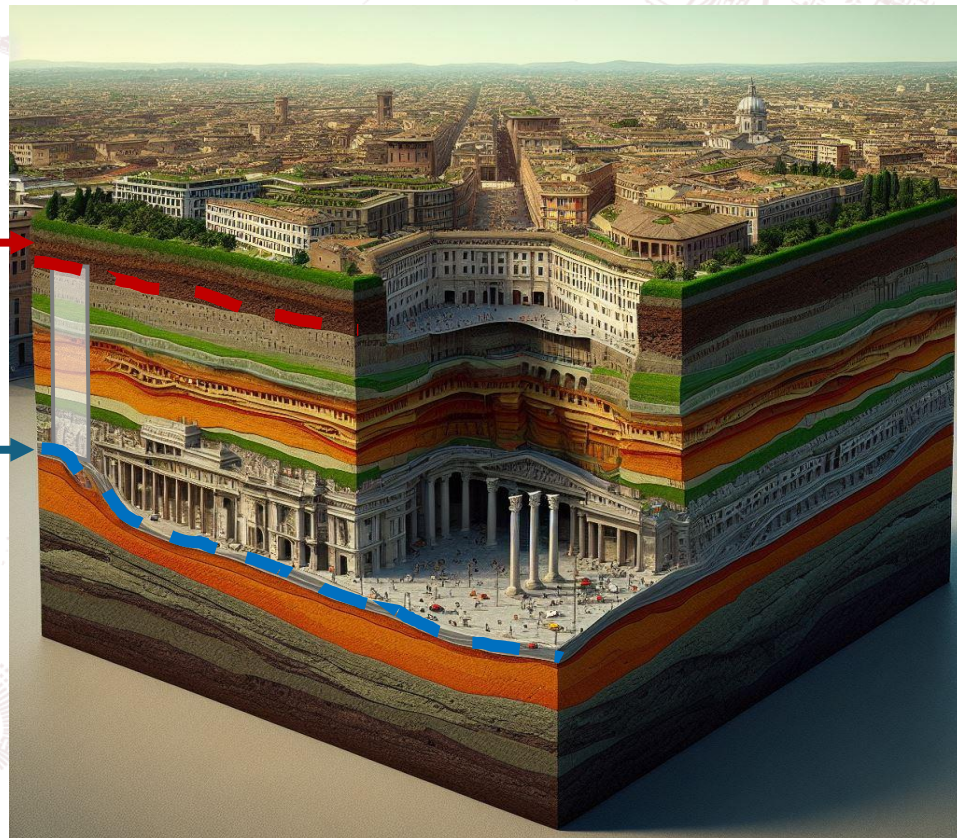
 Rome administrative boundaries
 Aurelian Walls boundaries



CURRENT SURFACE

strenght
of NATURAL and ANTHROPIC
events/activities

GEOLOGICAL MODIFIED SURFACE

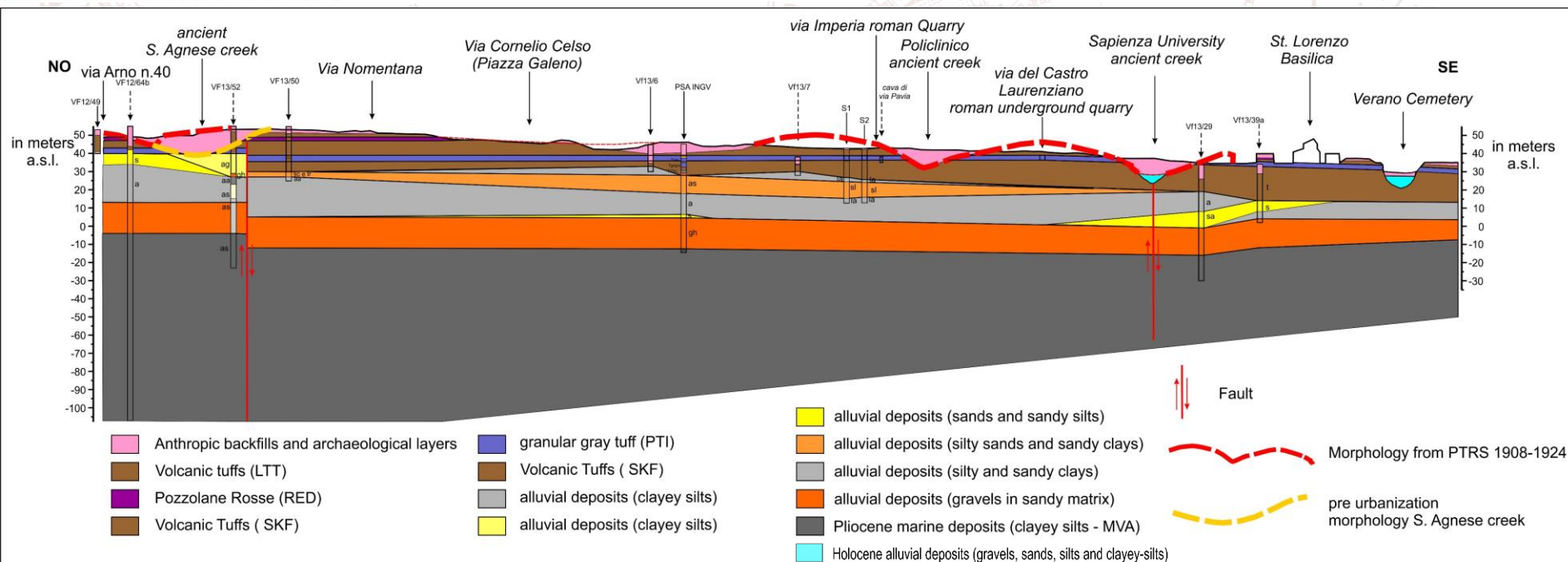


source: image created with Artificial Intelligence process

QUANTITATIVE APPROACH: DEFINING TOP AND BOTTOM LAYERS



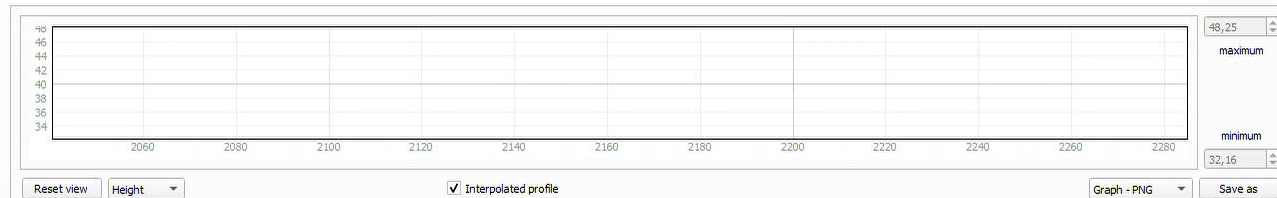
Geological section elaborated with all available data





Profile Tool

Profile Table Settings



Layer	Band/Field	Search buffer

Add Layer Remove Layer

Options

Selection Temporary polyline

☒ Show cursor ☒ Link mouse position on graph with canvas

☐ Same axis scale

Q Digita per localizzare (Ctrl+K)

Coordinata 2309383 4641751 Scala 1:11681 Lente d'ingrandimento 100% Rotazione 0,0 ° Visualizza EPSG:3004

ANALYSING AND DIGITIZING HISTORICAL CARTOGRAPHY



IGM 1872

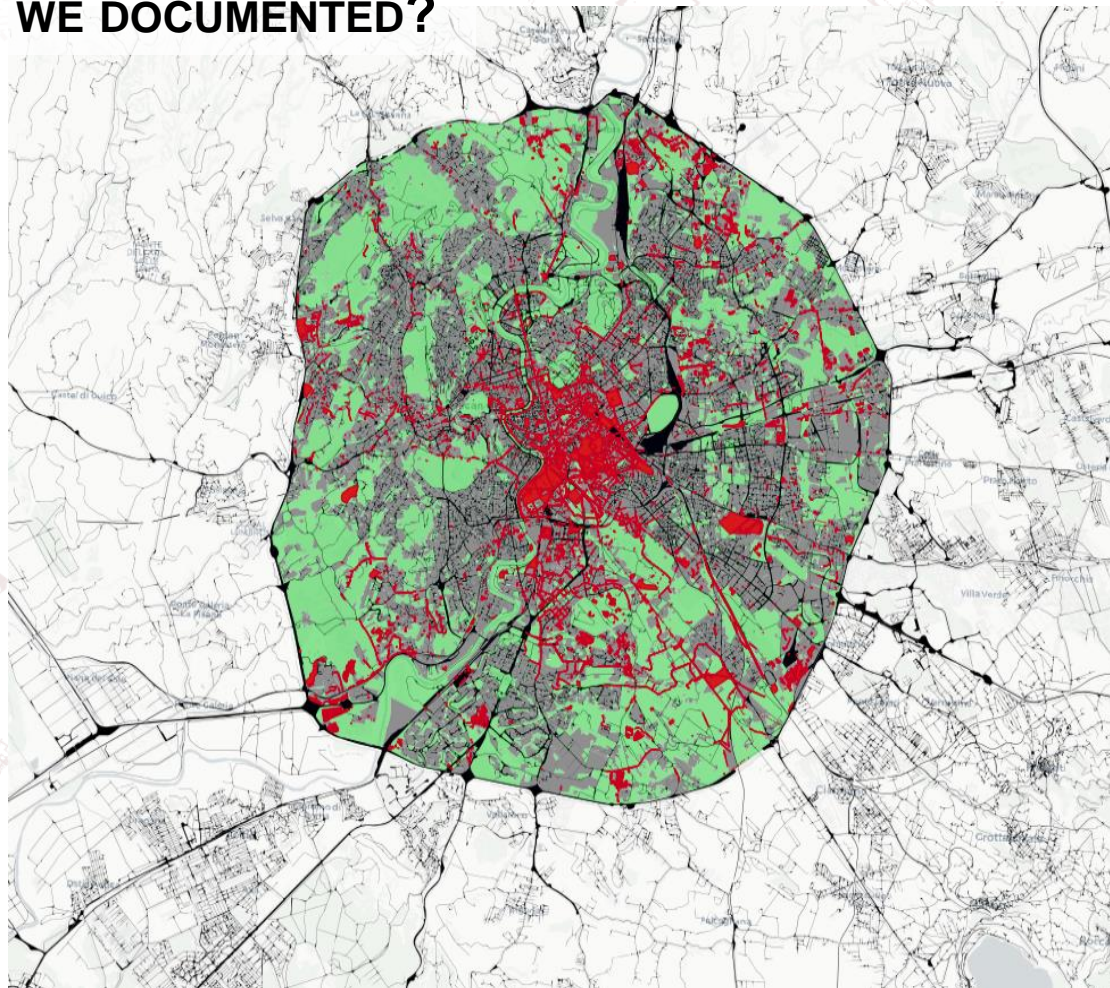


PTRS 1924

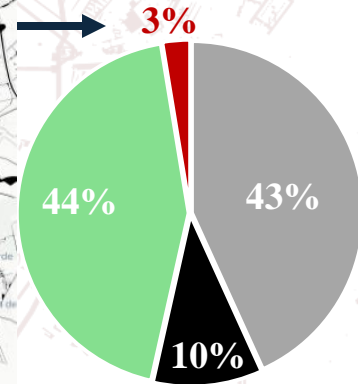


PRG 1908

HOW MUCH HAVE WE DOCUMENTED?

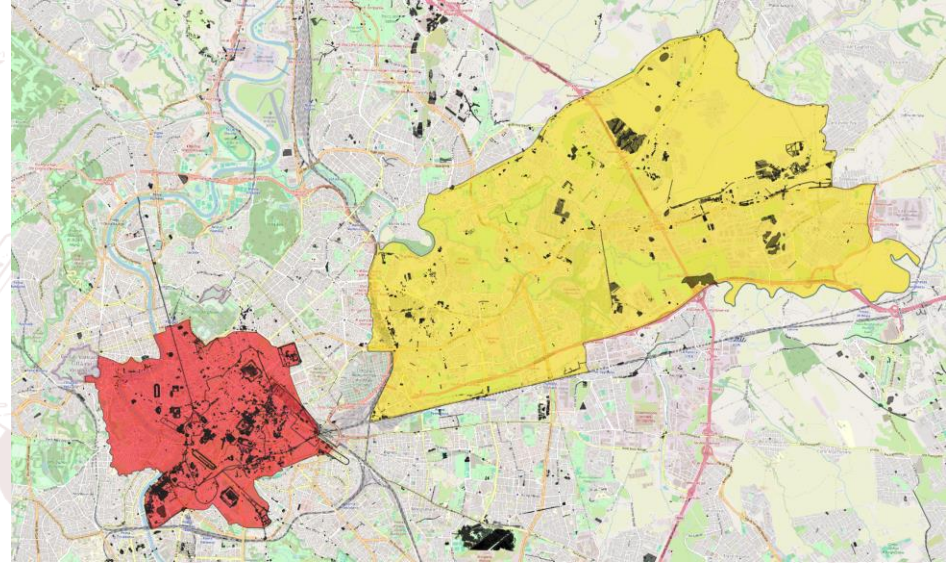
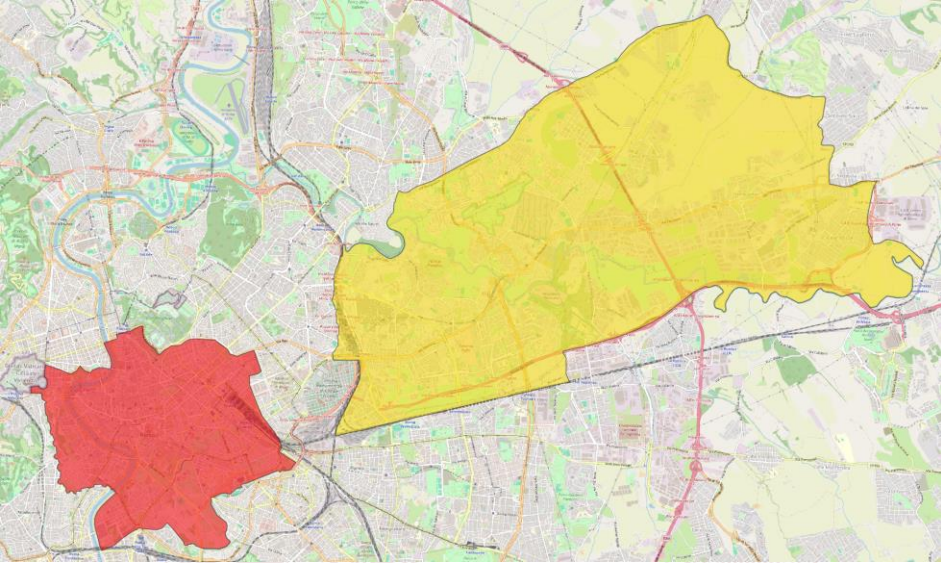


source: Copernicus – URBAN ATLAS 2018 Roma



QUALITATIVE APPROACH

THE EASTERN SUBURB



QUALITATIVE APPROACH, METHODOLOGY: CLASSIFICATION OF DATA BY HOMOGENEOUS CATEGORIES

NATIVE SITAR DATA

12

CLASSES OF DEFINITIONS
FOR INDIVIDUAL
ARCHAEOLOGICAL
PARTITIONS

distinctive coherent elements of land use

5

HOMOGENEOUS
MACRO
CATEGORIES

RESIDENTIAL
AREAS

FUNERARY

ROAD
NETWORK

PRODUCTIVE AND
AGRICULTURAL

RELIGIOUS AND
PUBLIC
BUILDINGS

RECLASSIFICATION OF
ARCHAEOLOGICAL DATA

FUNCTION

WHAT?

LOCALISATION

WHERE?

CHRONOLOGY

WHEN?

QUALITATIVE APPROACH, METHODOLOGY: CLASSIFICATION OF DATA BY HOMOGENEOUS CATEGORIES

CLASSES	RECONSTRUCTIVE CRITERIA APPLIED
ROAD NETWORK	Historical maps – Alignments - Geomorphology
FUNERARY	Extension hypothesis based on relative location to other classes (roads)
RESIDENTIAL AREAS	Location – Geomorphology - Relationship with other classes (roads, funerary)
PRODUCTIVE AND EXTRACTIVE AGRICULTURAL	Orientation – Geomorphology (location/exposure/slope)
RELIGIOUS AND PUBLIC BUILDINGS	Location - Multicentered localization

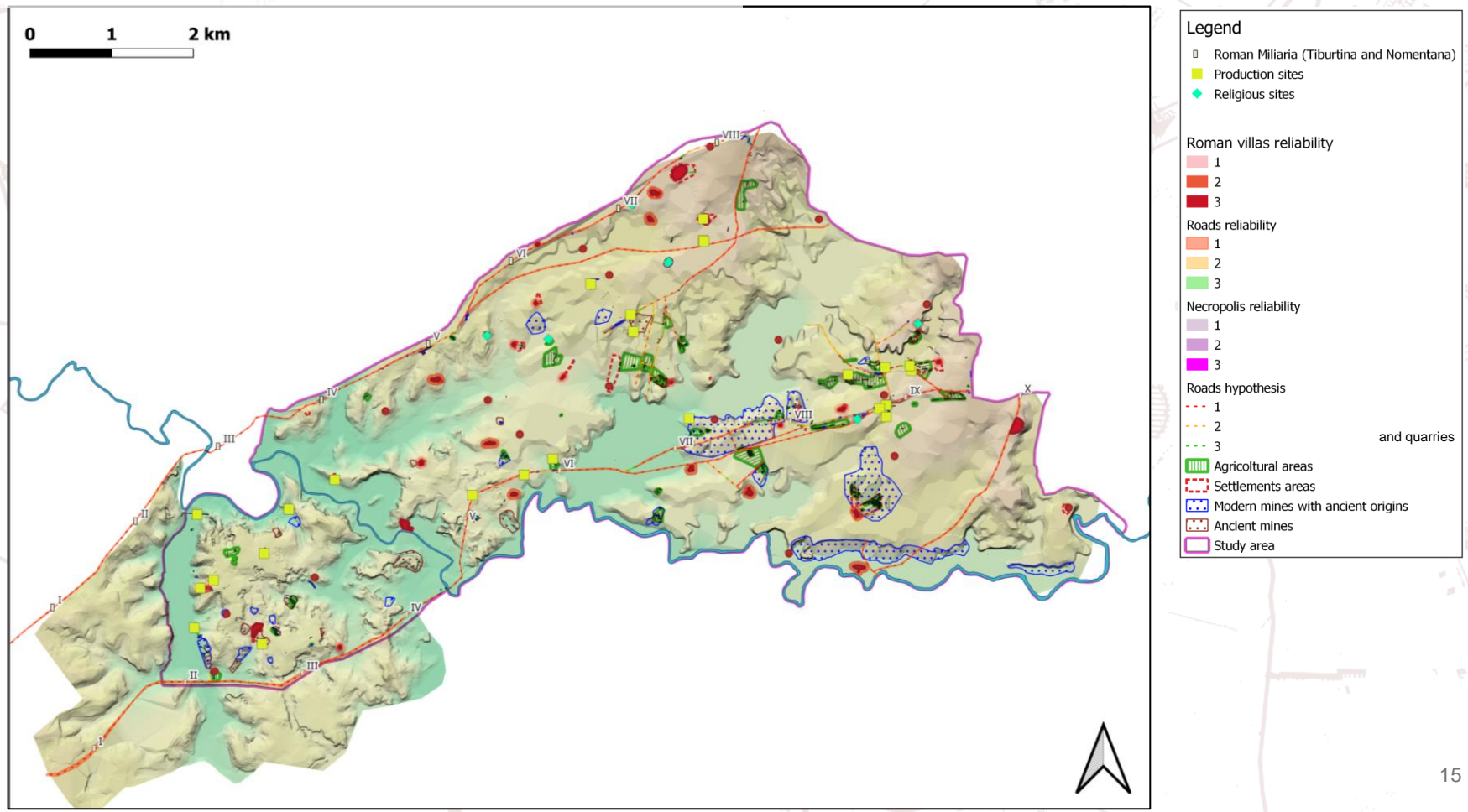
GEOMORPHOLOGY



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**

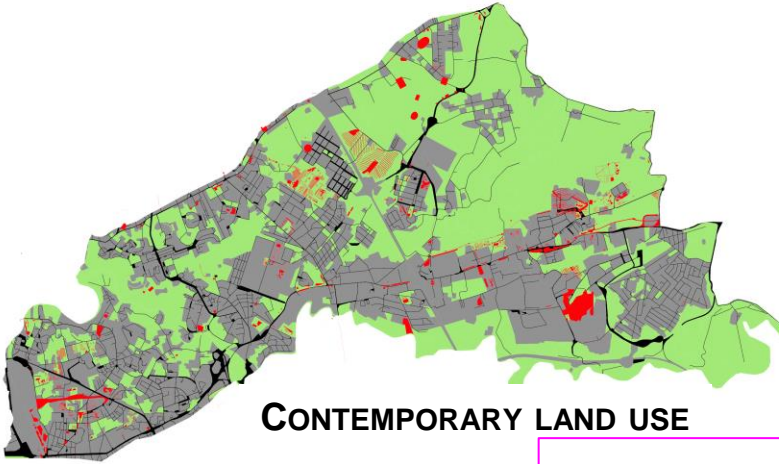
CASE STUDY



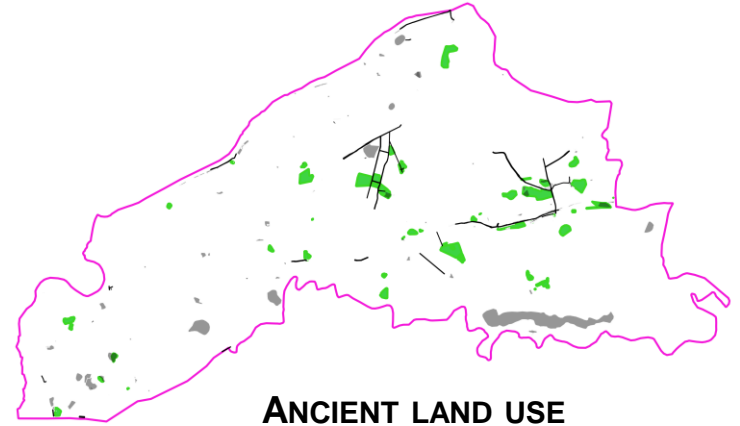
NEW AND “ANCIENT” COPERNICUS

0 1 2 km

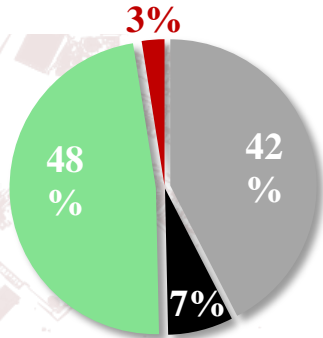
0 1 2 km



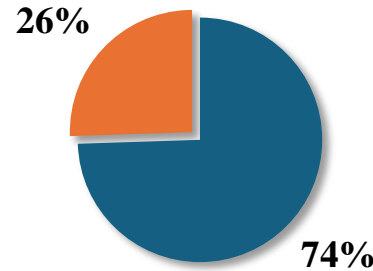
CONTEMPORARY LAND USE



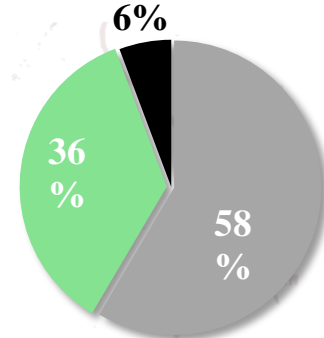
ANCIENT LAND USE



Similar areas SITAR/Copernicus



■ Similar between SITAR and Copernicus



ROAD NETWORK



Archaeological Parts

Roman roads SITAR

Crossroad hypothesis

1

2

3

Roads reliability

1

2

3

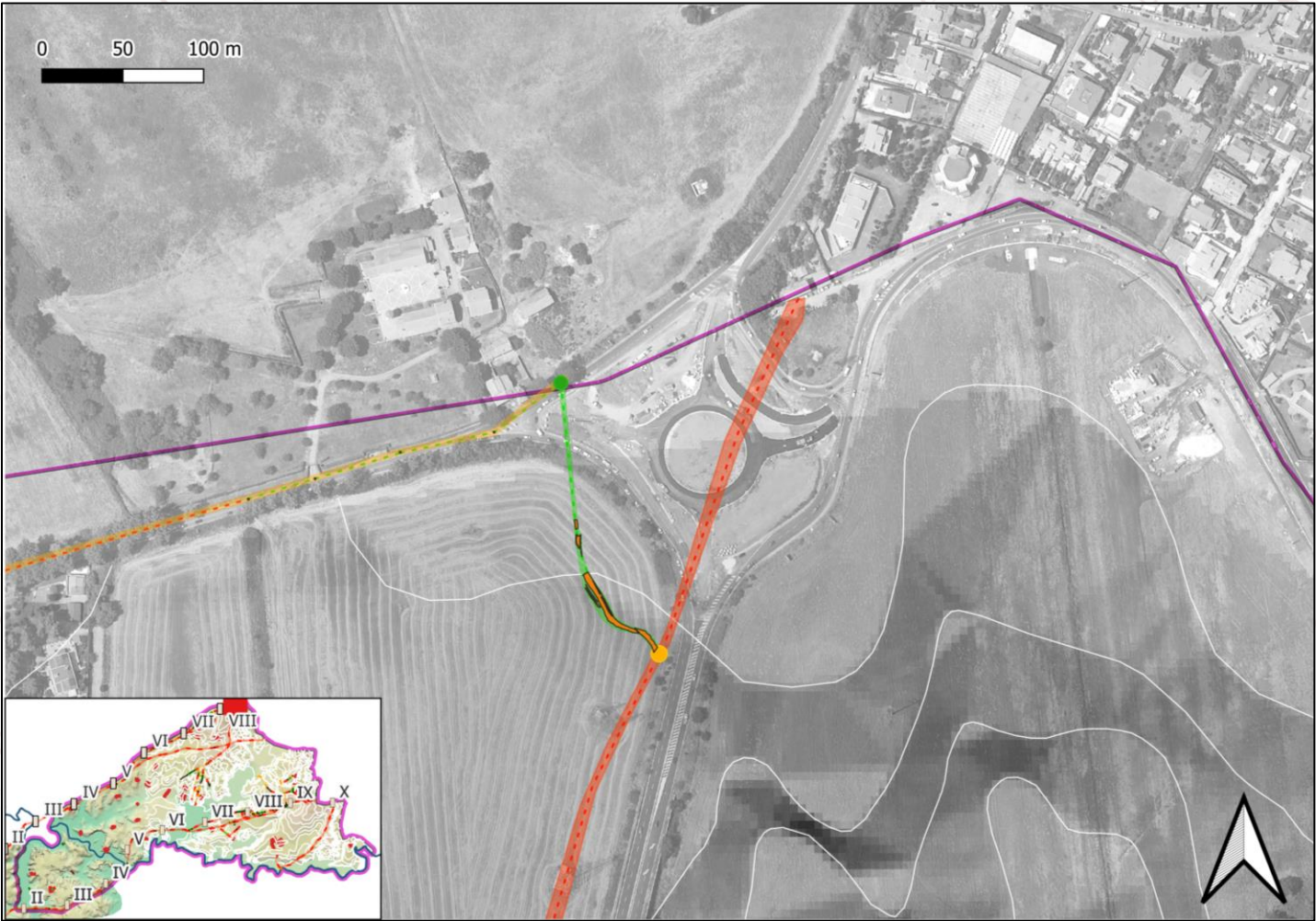
Roads hypothesis

1


2

3

ROAD NETWORK



Archaeological Parts

 Roman roads SITAR

Crossroad hypothesis

 2

 3

Roads reliability

 1

 2

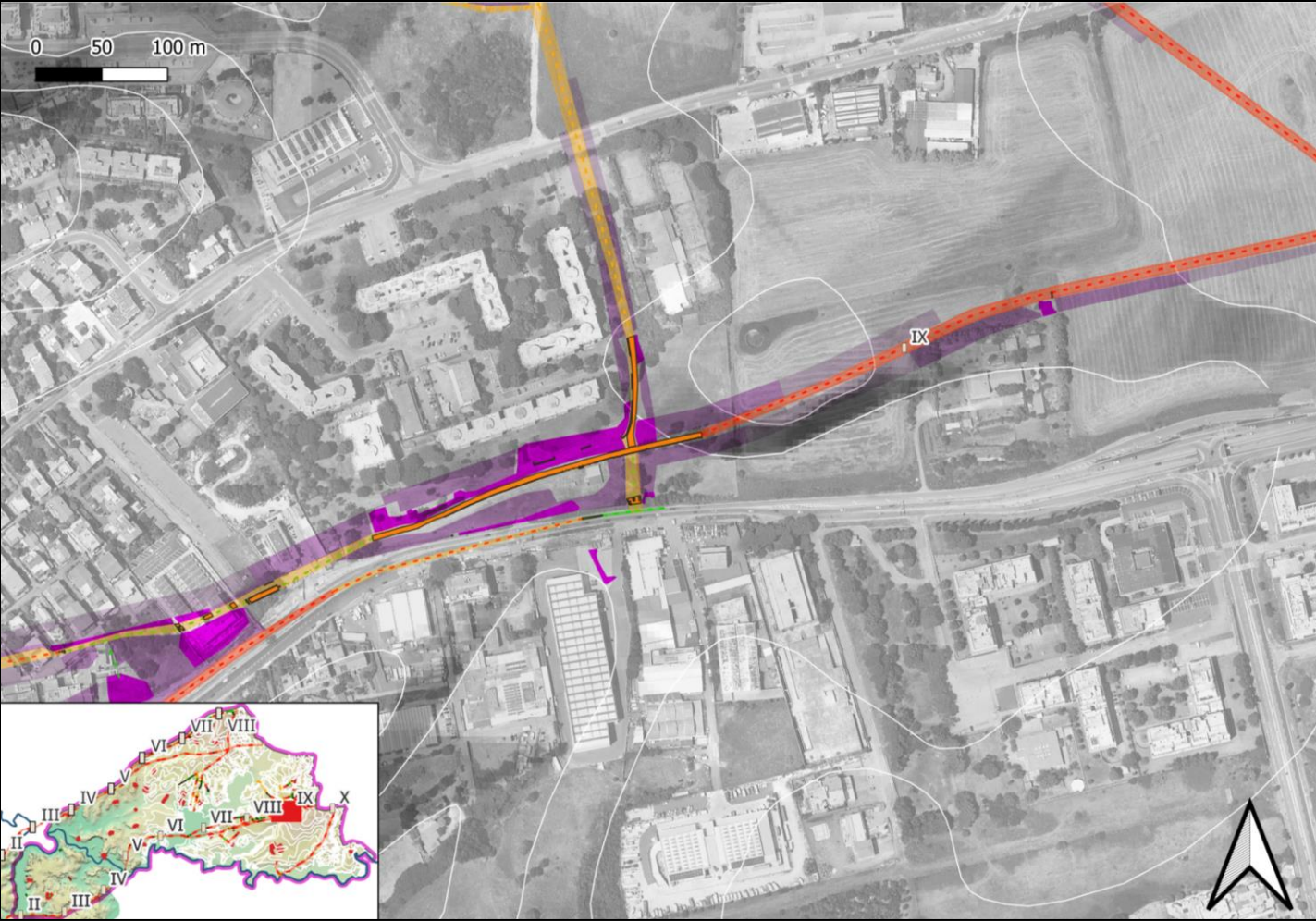
 3

Roads hypothesis

 1

 3

ROAD NETWORK



Archaeological Parts

Orange Roman roads SITAR

Roads reliability

1

2

3

Roads hypothesis

1

2

3

Necropoli reliability

1

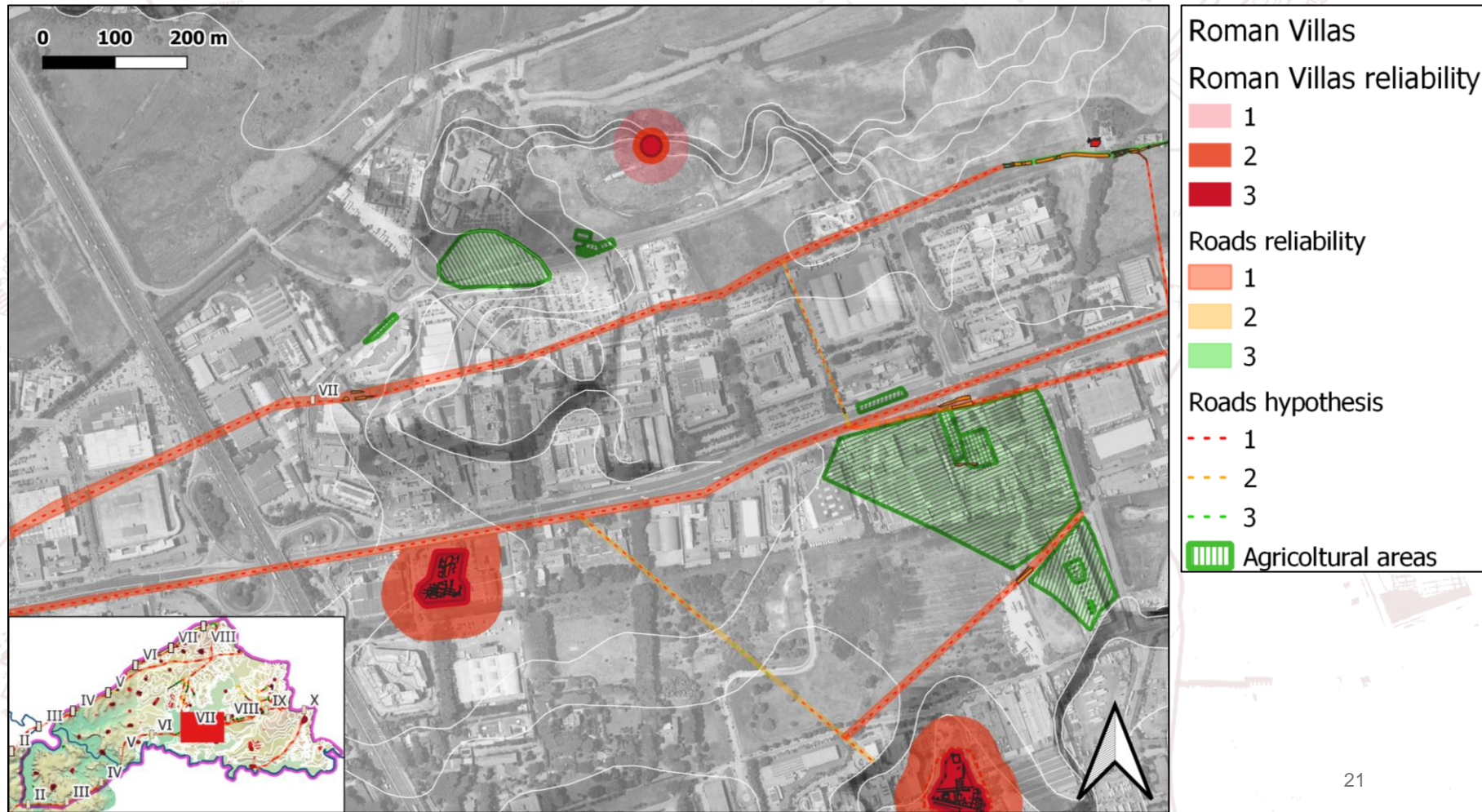
2

3

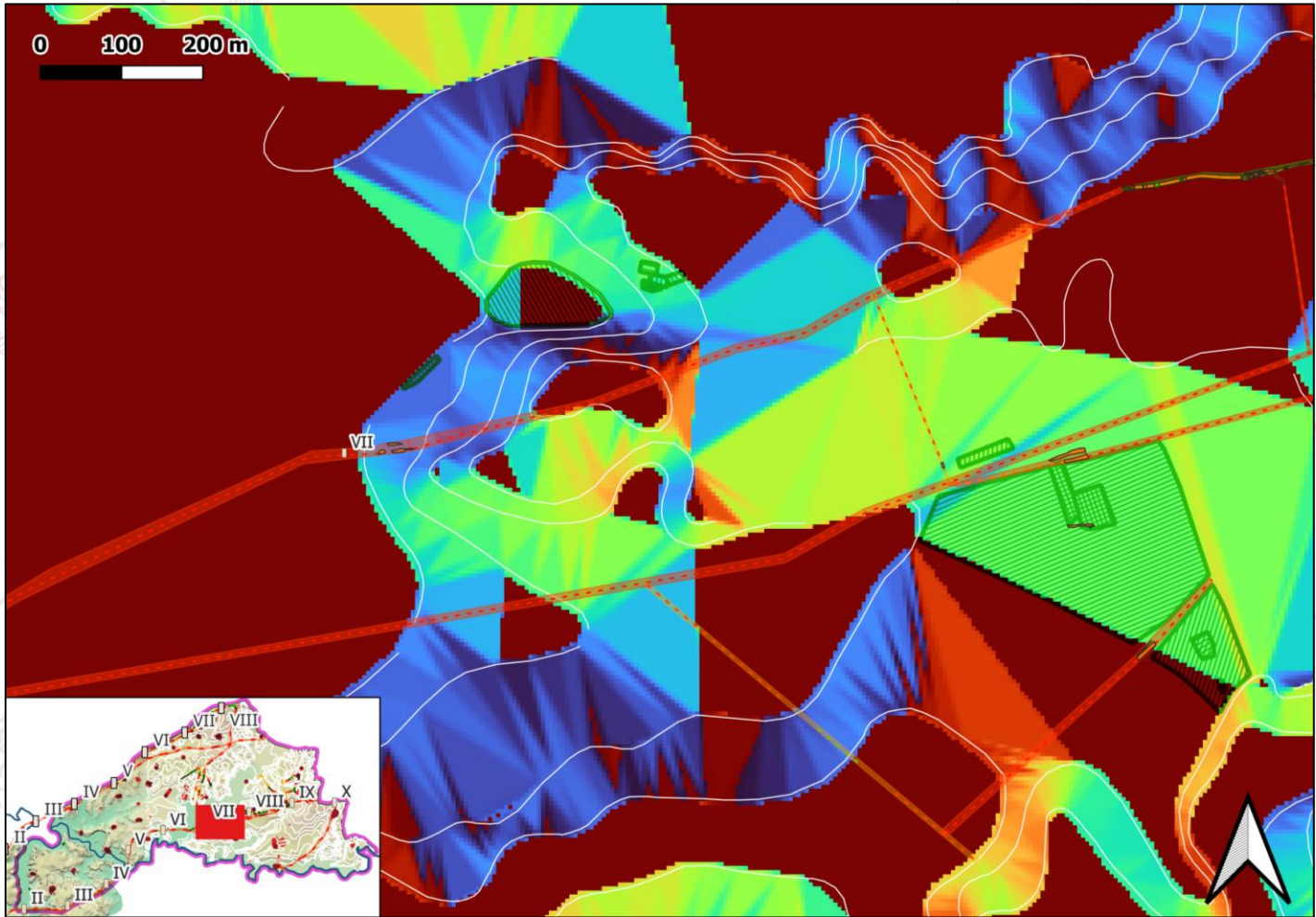
ROAD NETWORK



AGRICULTURAL AREAS



AGRICULTURAL AREAS



Roads reliability

- 1
- 2
- 3

Roads hypothesis

- 1
- 2
- 3

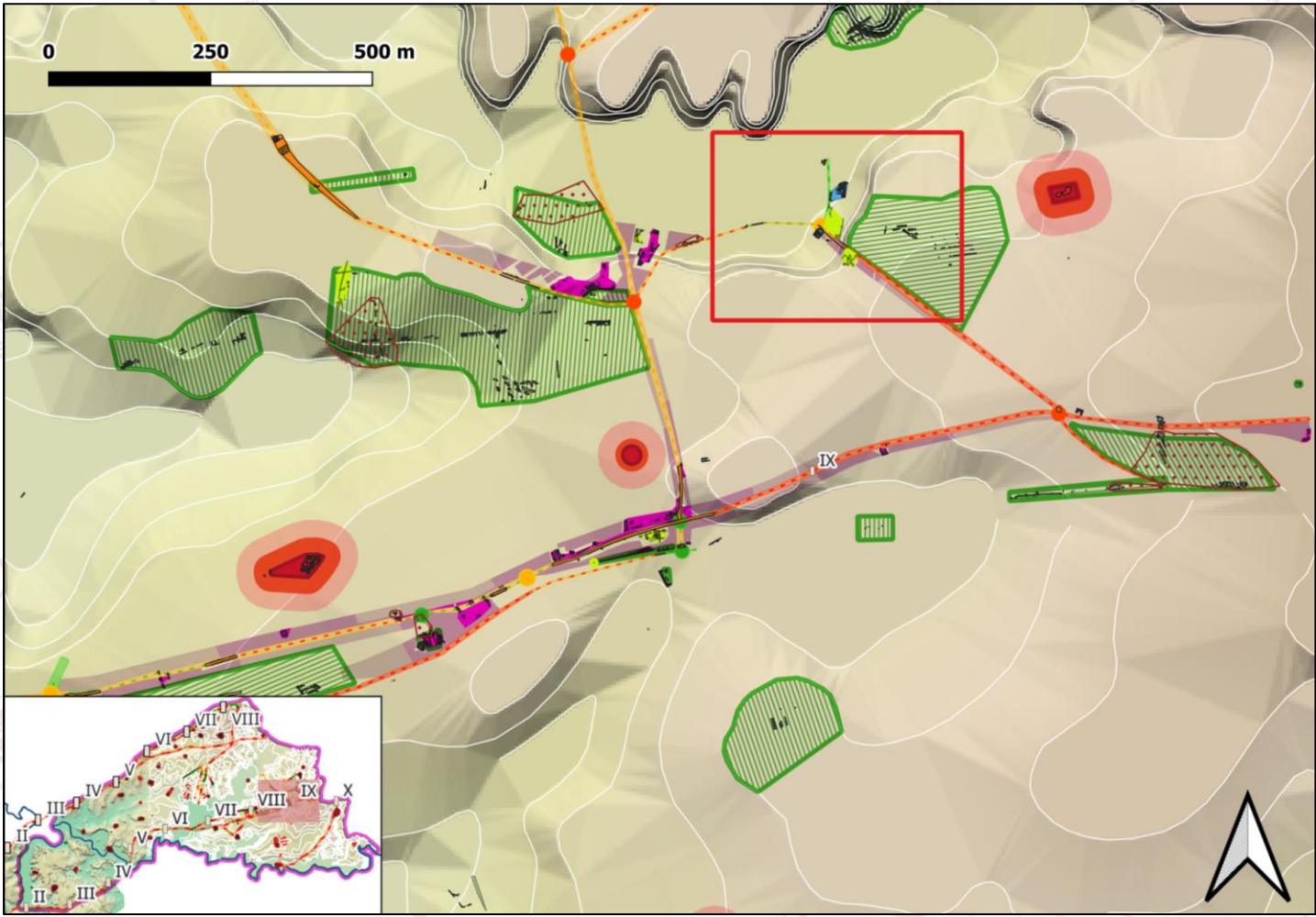
Agricultural areas

Light exposure (Days/year)

359,998383

0

PRODUCTIVE AREAS

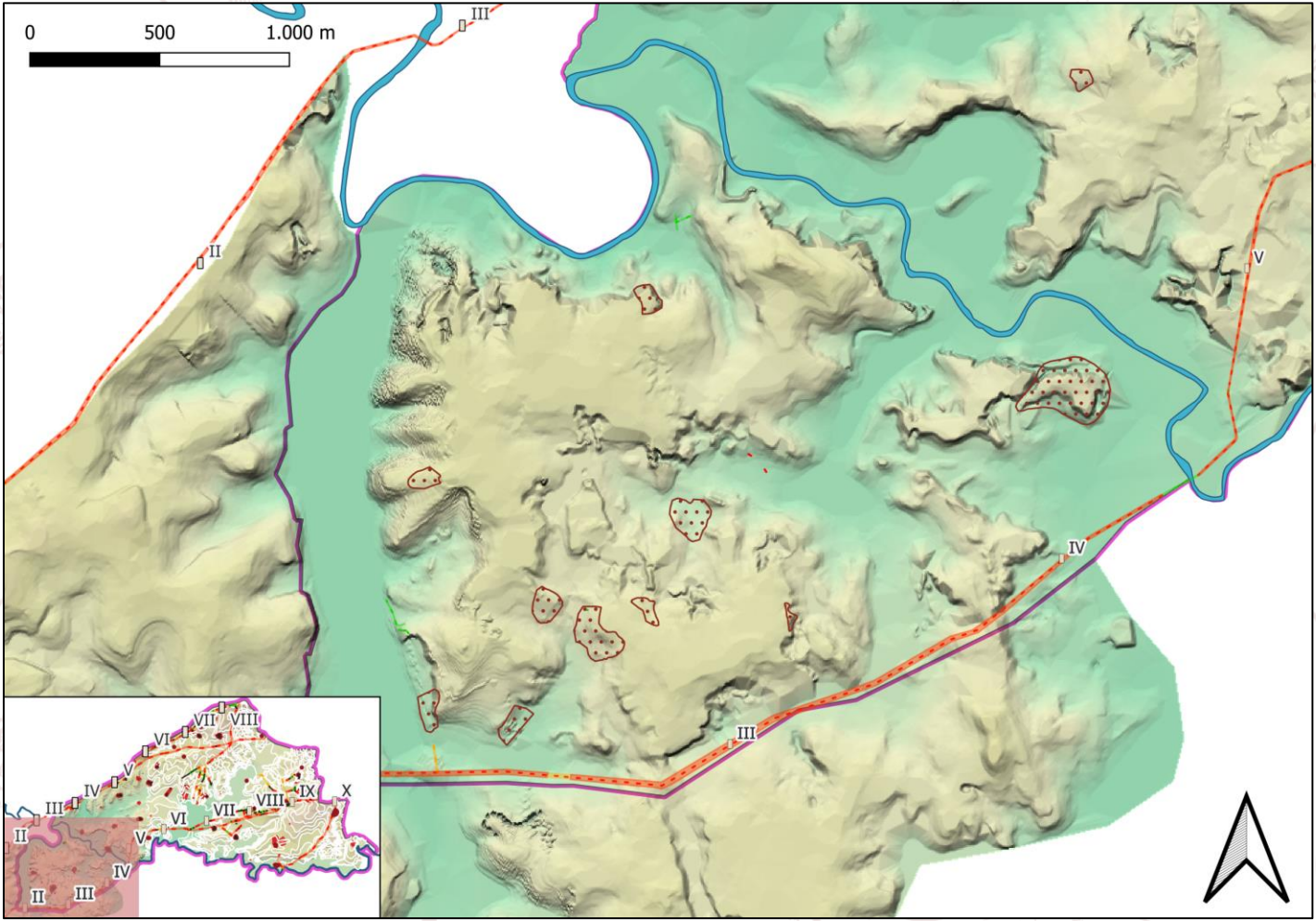


- Archaeological Parts
- Buildings
 - Religious buildings
 - Public buildings
 - Production buildings
 - Agricultural areas
- Mines and quarries
 - Ancient mines
- Roman Villas
- Roman Villas reliability
 - 1
 - 2
 - 3
- Crossroad hypothesis
 - 1
 - 2
 - 3
- Roads reliability
 - 1
 - 2
 - 3
- Roads hypothesis
 - 1
 - 2
 - 3

PRODUCTIVE AREAS



PRODUCTIVE AREAS: MINES AND QUARRIES



Archaeological Parts

Mines and Quarries

Ancient mines and quarries

Roads reliability

1

2

3

Roads hypothesis

1

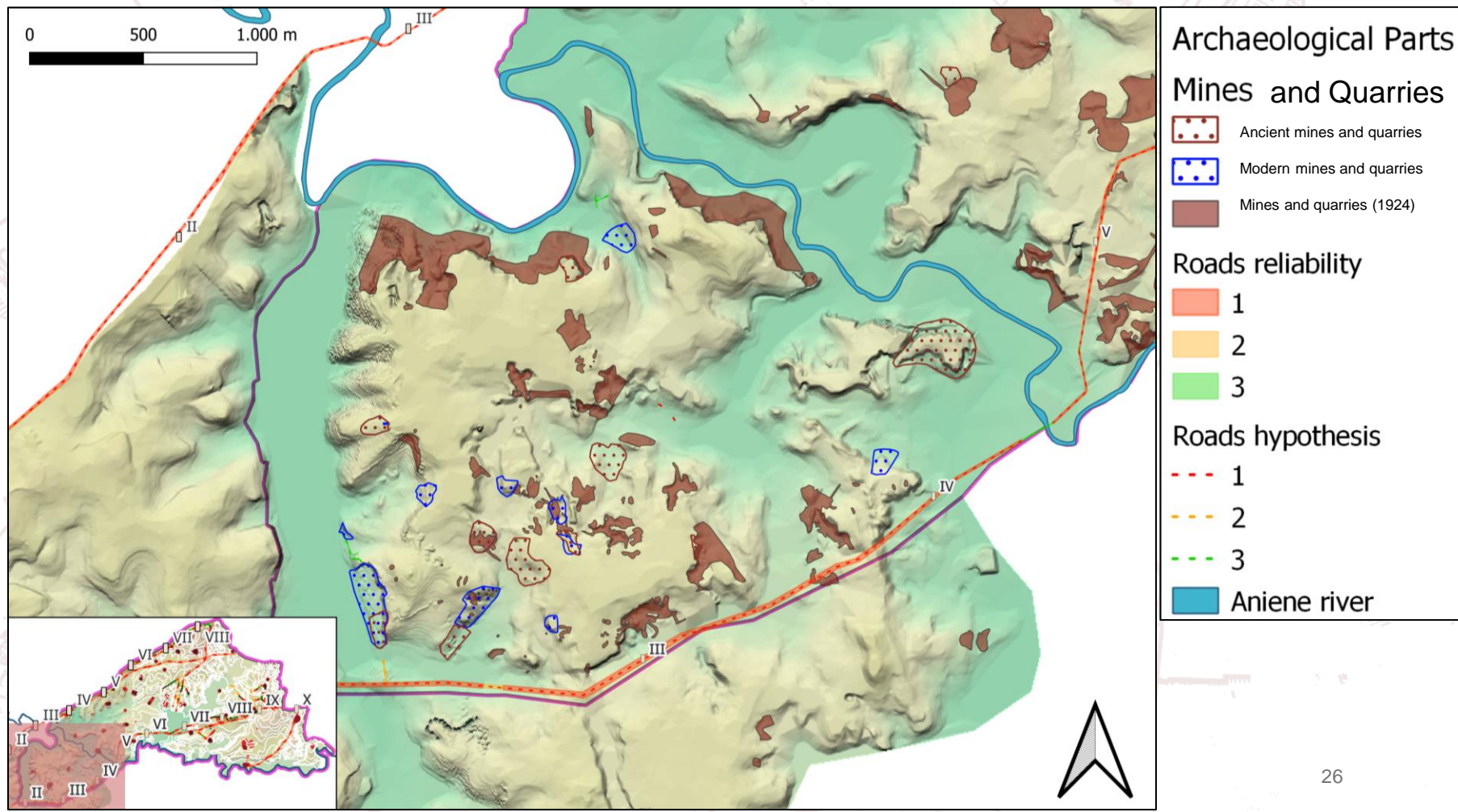
2

3

Aniène river



PRODUCTIVE AREAS: MINES AND QUARRIES



RESIDENTIAL AREAS



Roman Villas

Roman Villas reliability

1
2
3

Roads reliability

1
2

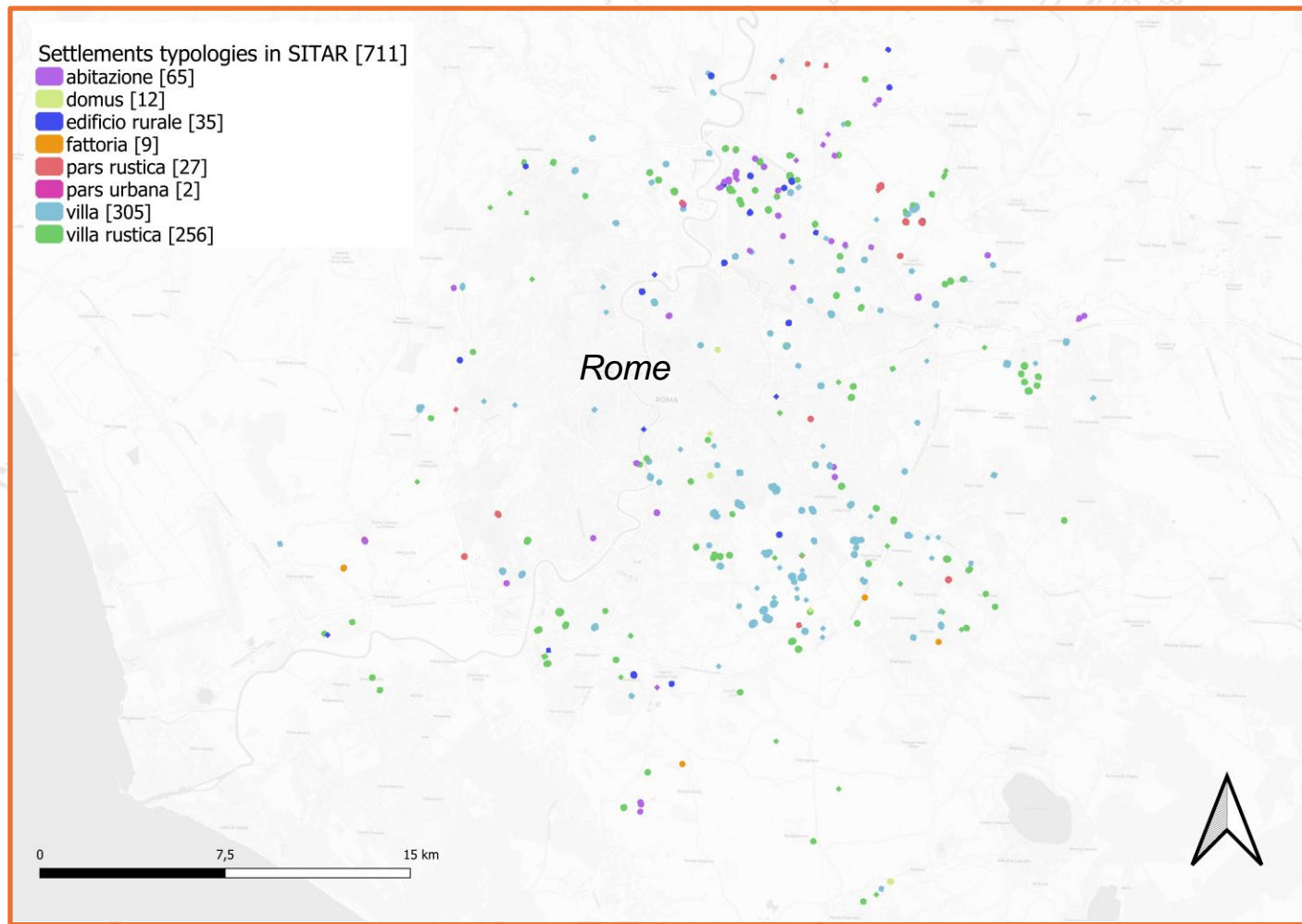
Roads hypothesis

1
2
3

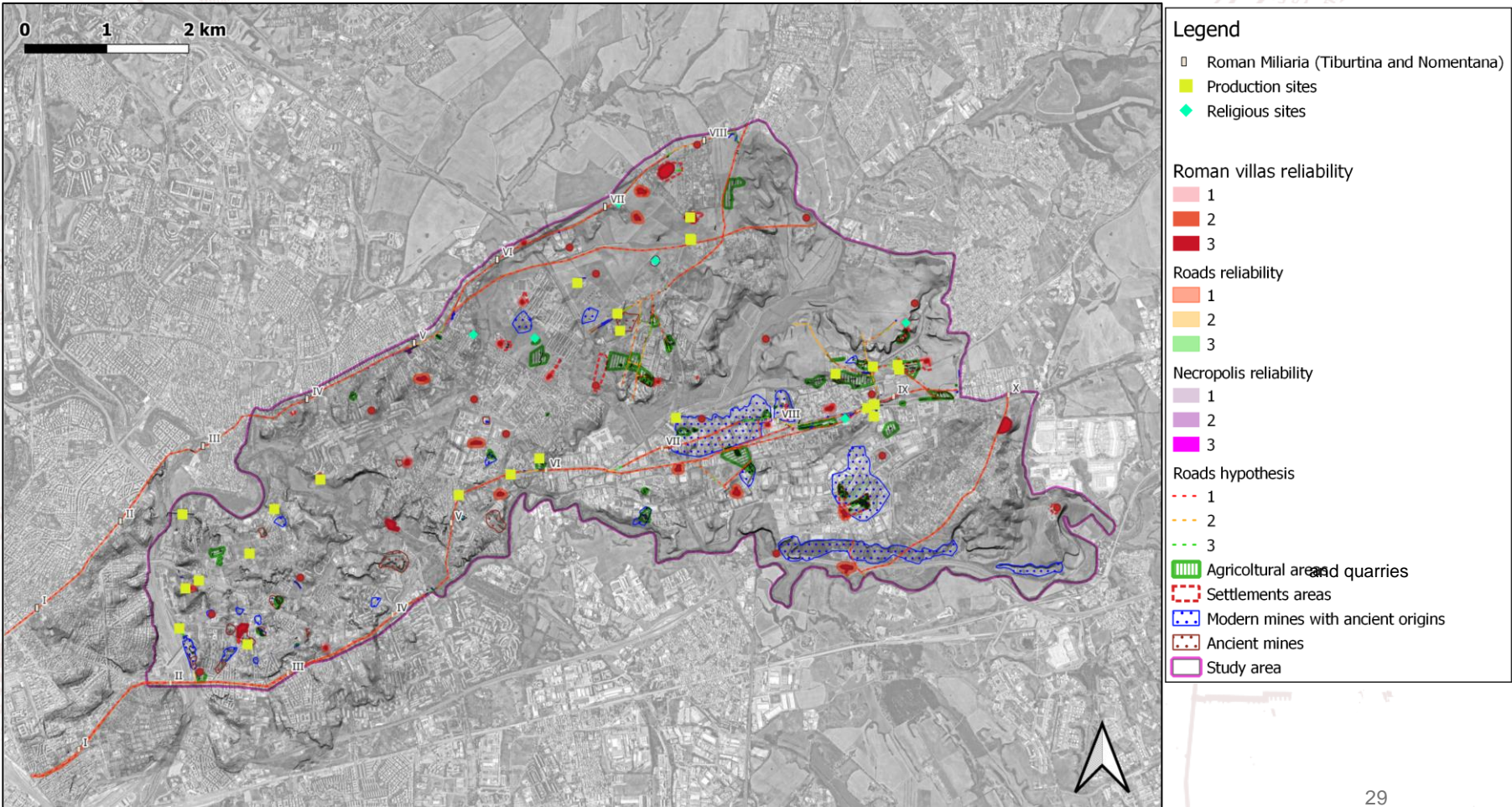
RESIDENTIAL AREAS

Settlements typologies in SITAR [711]

- abitazione [65]
- domus [12]
- edificio rurale [35]
- fattoria [9]
- pars rustica [27]
- pars urbana [2]
- villa [305]
- villa rustica [256]



ASSESSMENT DATA ANALYSIS





THANK YOU!
archeositarproject@cultura.gov.it