

# COMPUTER APPLICATIONS AND QUANTITATIVE METHODS IN ARCHAEOLOGY KEEP THE REVOLUTION GOING

SIENA, 30 MARZO - 2 APRILE 2015



**SITAR** Sistema Informativo Territoriale  
Archeologico di Roma

<http://sitar.archeoroma.beniculturali.it/>

The banner features three panels: a black and white aerial photograph of an archaeological site, a detailed architectural plan of a complex with a central circular structure, and a 3D digital reconstruction of the same site with color-coded areas.

## **Open Data in archeology: some open issues**

The case of the Archaeological Geographic Information System of Rome  
M. SERLORENZI, I. JOVINE, V. BOI, M. STACCA

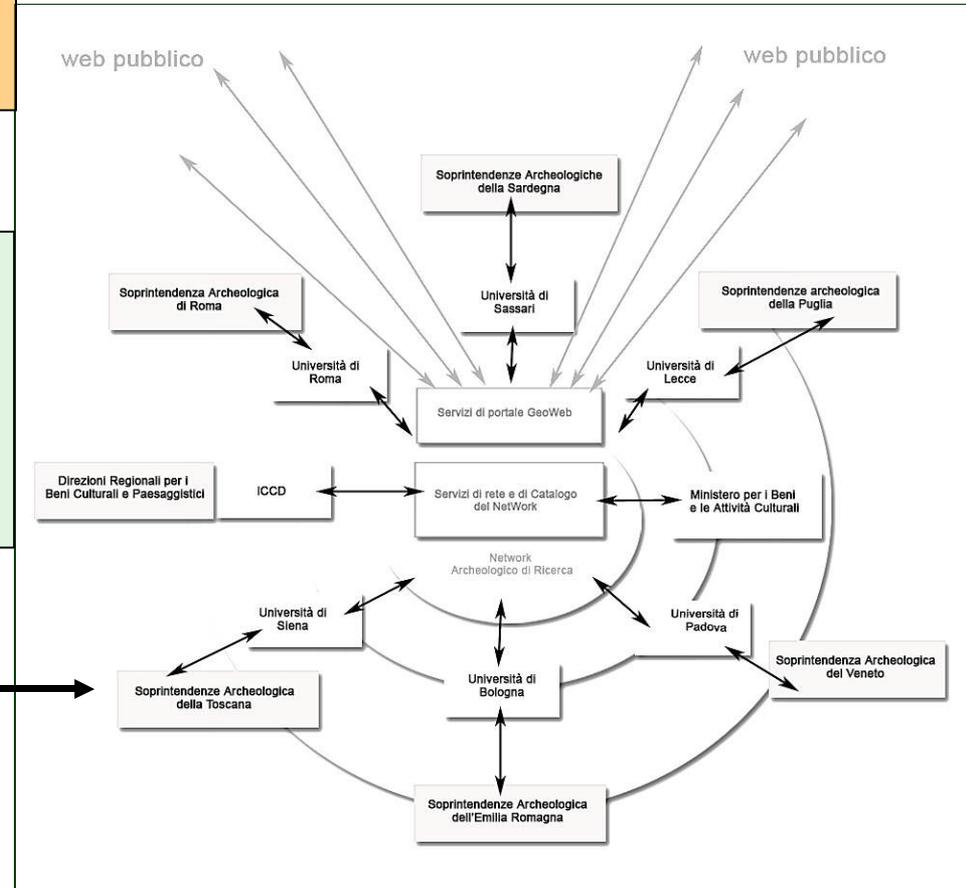
# SITAR Project: management, protection and enhancement of the archaeological heritage



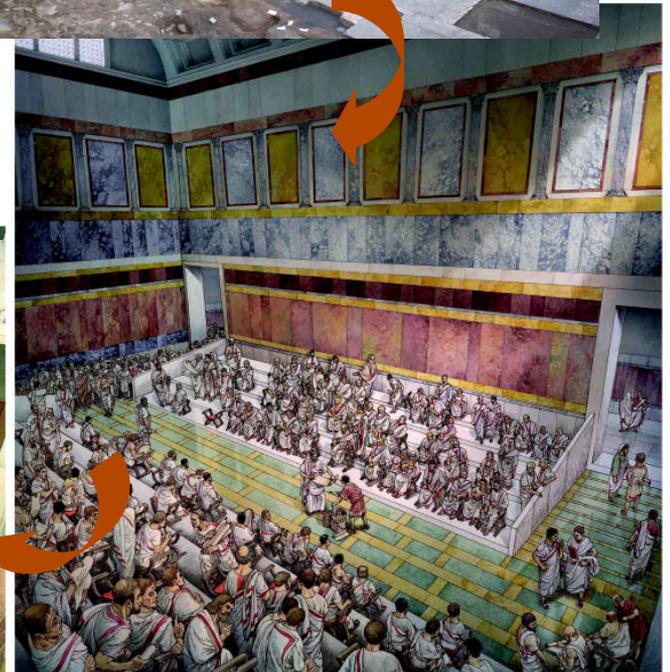
# SITAR Project: the design context

**January 2007:**  
Joint Ministerial Commission  
for the creation of a **Geographic Information System for the city and the Italian territory**

**December 2009:**  
Joint Ministerial Commission  
for the creation of a **National Archaeological Geographic Information System**



# SITAR: Information and Communication



# SITAR: Information and Communication

**Sistema Informativo Territoriale Archeologico di Roma**  
L'accesso con credenziali pubbliche al WebGIS è possibile mediante l'utente "demostrator" e password "demostrator".  
Le applicazioni SITAR sono elencate nella tab "Applicazioni".

**SITAR**  
SISTEMA INFORMATIVO TERRITORIALE ARCHEOLOGICO

Chiedi Organismo Informativo 2182  
Codice SITAR: 1052  
Ente Proprietario: Soprintendenza Speciale per i Beni Archeologici di Roma  
Funzionario responsabile: Rita Paris  
Metodologia di indagine: Ricerca bibliografica  
Data avvio: 02/03/2019  
Data fine: 31/12/2019  
Etichette scientifiche: Murae (Archeologia) Medii, Corredi (Archeologia) Minori, G. Sabine, G. Batti  
Soggetto richiedente:  
Soggetto esecutore:  
Descrizione lavori: Circa 100 cartografie digitali in scala, costituite da una cartografia bibliografica e archivistica e da una serie di rilev. (partita, pianta e  
Indici documentari: Tipo: Piantine - Data: Stato ambiente:  
Mappa: Mappa (elemento trovato):  
Città/Iniziativa: Roma  
Reparto amministrativo: Municipio Roma I (Sb I Municipi) dal 11/03/13  
Località: Trione XVI Gallo  
Indirizzo: Via S. PIORRA SAN SEBASTIANO 13 A  
Gradi georeferenz.: Carta  
Metodo di georeferenz.: Base cartografica vettoriale (versione anno 2004)  
Gradi di rappresent.: Cartografia

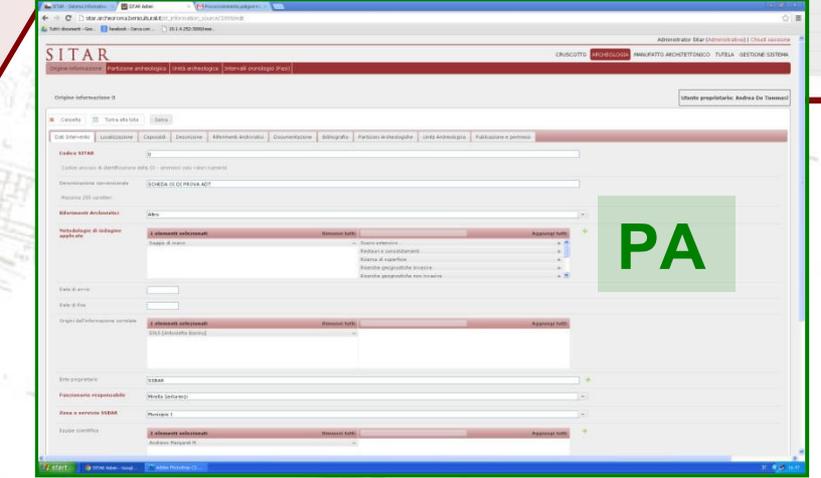
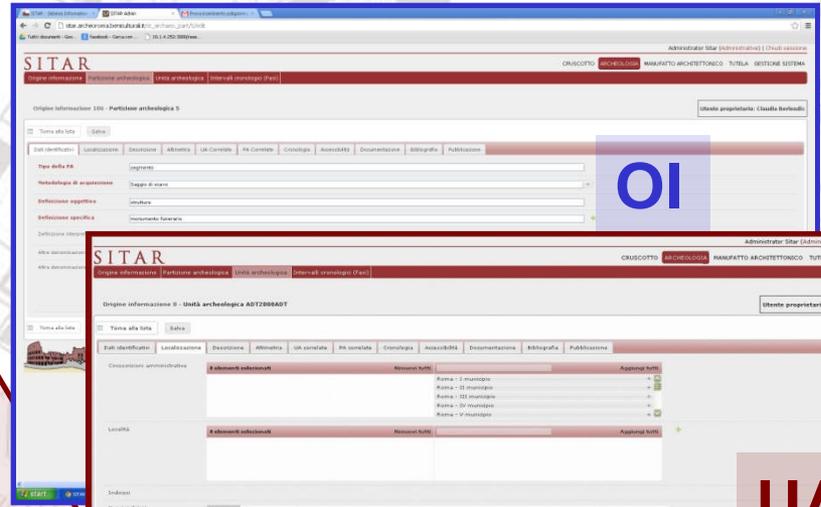
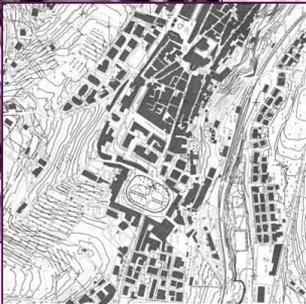
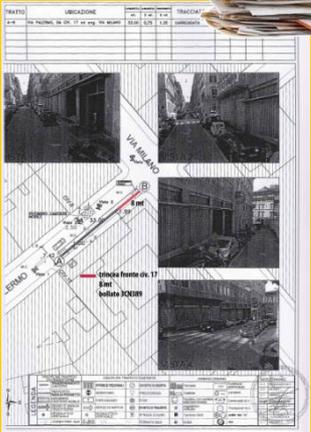
**DUE SEPOLCRI ROMANI**  
DAL SEPOLCRO DI ARREVERO  
IN UN'ARCA  
PRESSO LA TOMBA DEGLI SCIPIONI  
DA G. G. FERRAZZANO  
ILLUSTRAZIONE  
DAL MUSEO LAZIO  
NELLA BIBLIOTECA DELLE UNIVERSITÀ DI ROMA

**SECONDO CALDERANO COHEN**  
NO COHEN

**TAE**  
Scala = 1 : 1000  
231.700.3306, 4639000.6989

**mirella.serlorenzi@beniculturali.it**  
**ssba-rm.gis@beniculturali.it**

# SITAR: Digitization and standardization





# SITAR: WEB Applications

sitar.archeoroma.beniculturali.it  
Sistema Informativo Territoriale Archeologico di Roma

Home Applicazioni

## Sistema Informativo Territoriale Archeologico di Roma

L'accesso con credenziali pubbliche al WebGIS è possibile mediante l'utenza "demositar" e password "demositar"

Le applicazioni SITAR sono elencate nella tab "Applicazioni"



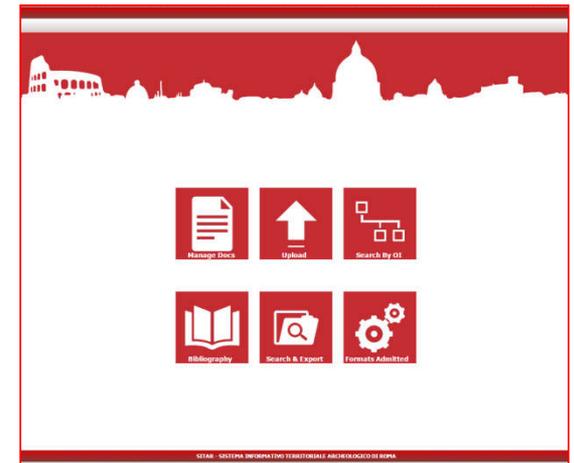
## wikiSITAR - ambiente work in progress

Il wiki del progetto SITAR, pensato e costruito per accogliere i contenuti progettuali del Sistema Informativo Archeologico della SSBAR, e per renderli facilmente fruibili agli utenti del sistema.

WikiSITAR è costantemente in progress, sia per aggiornarsi con le informazioni e i documenti progressi prodotti per la progettazione di SITAR, sia in quanto il progetto stesso si considera in progress sin dalla sua stagione di avvio.

Le pagine sono implementabili e modificabili solo dal gruppo di lavoro del SITAR, ma i commenti a ciascuna pagina sono liberi e attesi.

Visualizza Commenti Versioni Indice File



<http://webgis.archeoroma.beniculturali.it/sitarmap/login.php>

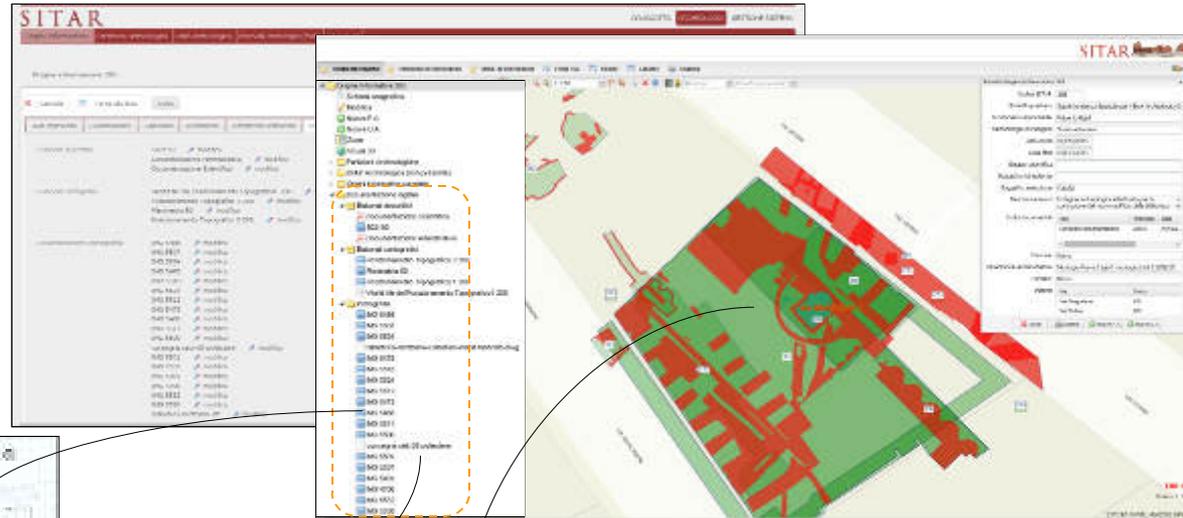
<https://beniculturali.academia.edu/ProgettoSITAR/>

<http://sitarmoodle.archeoroma.beniculturali.it/>

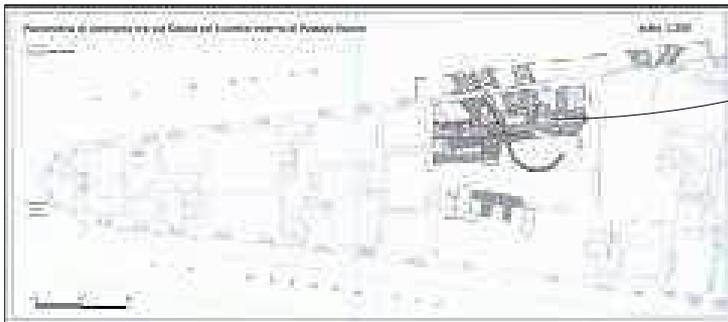
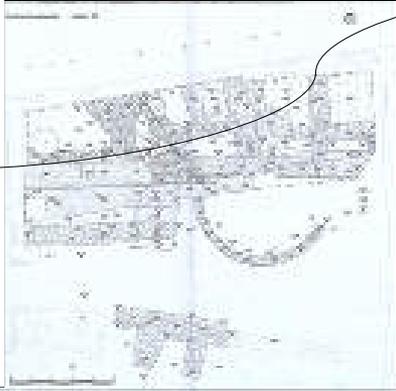
<https://beniculturali.academia.edu/SITARProjectKnowledgeExperienceBase/>

The image shows a login form for the SITAR system. It features the SITAR logo at the top right. Below the logo, there are two input fields: "Utente:" and "Password:". At the bottom, there are three buttons: "Entra" (login), "Annulla" (cancel), and "Cambia Password" (change password).

# The process of archaeological research



Aggiornamento cartografico in AutoCAD  
2004/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100/101/102/103/104/105/106/107/108/109/110/111/112/113/114/115/116/117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000



# SITAR: digital acquisition and archiving of documents

SIGEDO



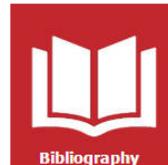
Manage Docs



Upload



Search By OI



Bibliography



Search & Export



Formats Admitted

Login

Username:

Password:

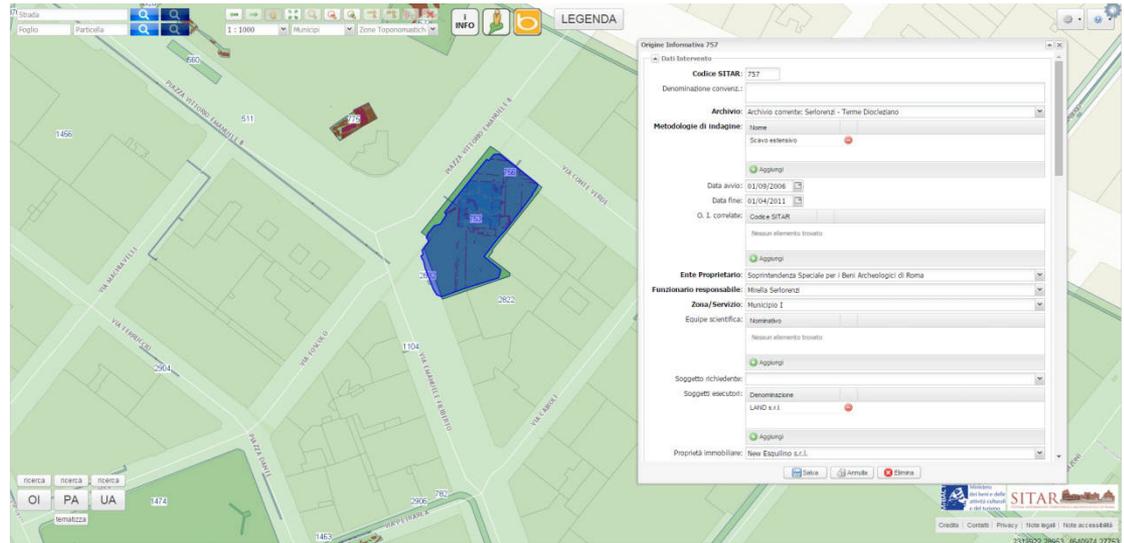
Login

SITAR - SISTEMA INFORMATIVO TERRITORIALE ARCHEOLOGICO DI ROMA

# SITAR: DATA PUBLICATION

## OI - Origin of the Information

OWNER AUTHORITY	😊
MANAGING OFFICIAL	😊
<b>ESTATE OWNER</b>	😞
RESEARCH METHOD	😊
START AND END OF RESEARCH	😊
SCIENTIFIC TEAM	😊
<b>APPLICANT</b>	😞
RESEARCHER	😊
WORK DESCRIPTION	😊
ARCHIVE REFERENCES	😊
DISTRICT	😊
MUNICIPALITY	😊
AREA	😊
<b>ADDRESS</b>	😞
GEO-REFERENCING CODE	😊
GEO-REFERENCING METHOD	😊
KIND OF REPRESENTATION	😊



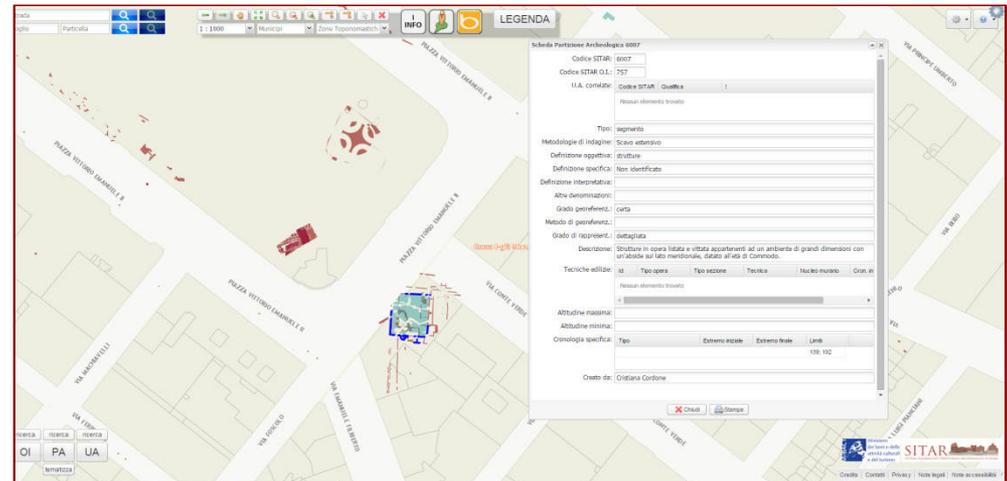
Applied License :



# SITAR: DATA PUBLICATION

## PA - Archaeological Part

SITAR CODE	😊
RESEARCH METHOD	😊
OBJECTIVE DEFINITION	😊
SPECIFIC DEFINITION	😊
INTERPRETATION'S DEFINITION	😊
GEO-REFERENCING CODE	😊
GEO-REFERENCING METHOD	😊
KIND OF REPRESENTATION	😊
DESCRIPTION	😊
BUILDING TECHNIQUE	😊
MAXIMUM ELEVATION	😊
MINIMUM ELEVATION	😊
CHRONOLOGY	😊



Applied License :

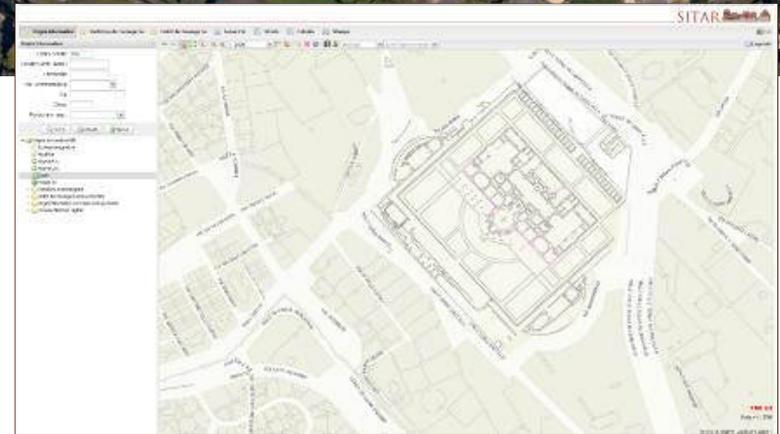
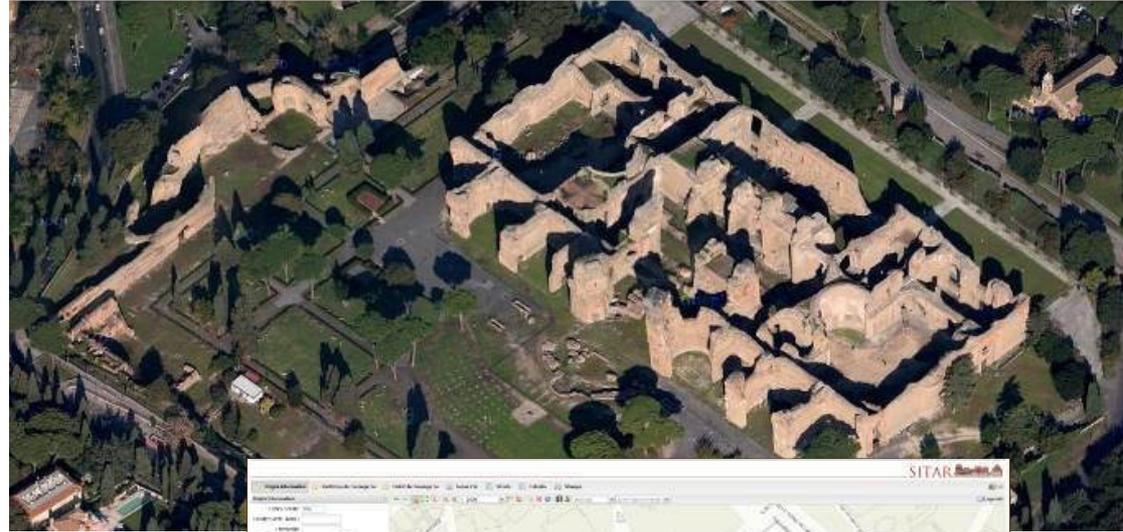


The adoption of this type of license allows for derivative works to preserve information about **the source of scientific data.**

# SITAR: DATA PUBLICATION

## UA - Archaeological Unit

SITAR CODE	😊
RESEARCH METHOD	😊
OBJECTIVE DEFINITION	😊
SPECIFIC DEFINITION	😊
INTERPRETATION'S DEFINITION	😊
GEO-REFERENCING CODE	😊
GEO-REFERENCING METHOD	😊
KIND OF REPRESENTATION	😊
DESCRIPTION	😊
BUILDING TECHNIQUE	😊
MAXIMUM ELEVATION	😊
MINIMUM ELEVATION	😊
CHRONOLOGY	😊



Applied License :



# Italian Regulatory Framework



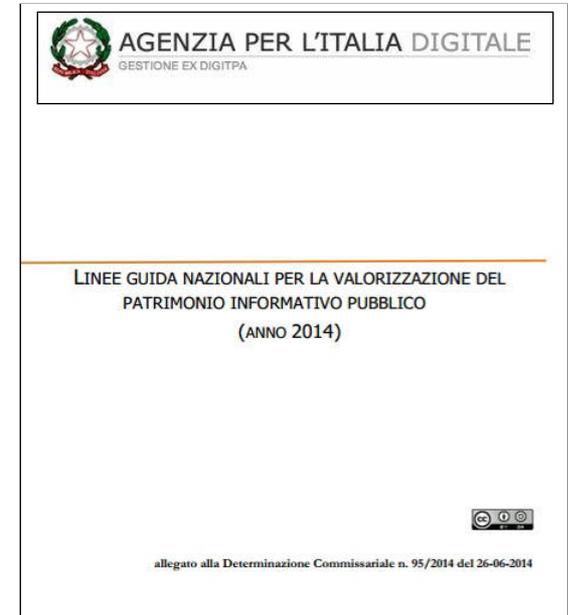
**D.Lgs. 82/2005:** CAD, DIGITAL ADMINISTRATION CODE

**D.Lgs. 36/2006:** RE-USE OF DOCUMENTS IN PUBLIC ADMINISTRATION

**D.L. 179/2012:** Decreto Sviluppo 2.0

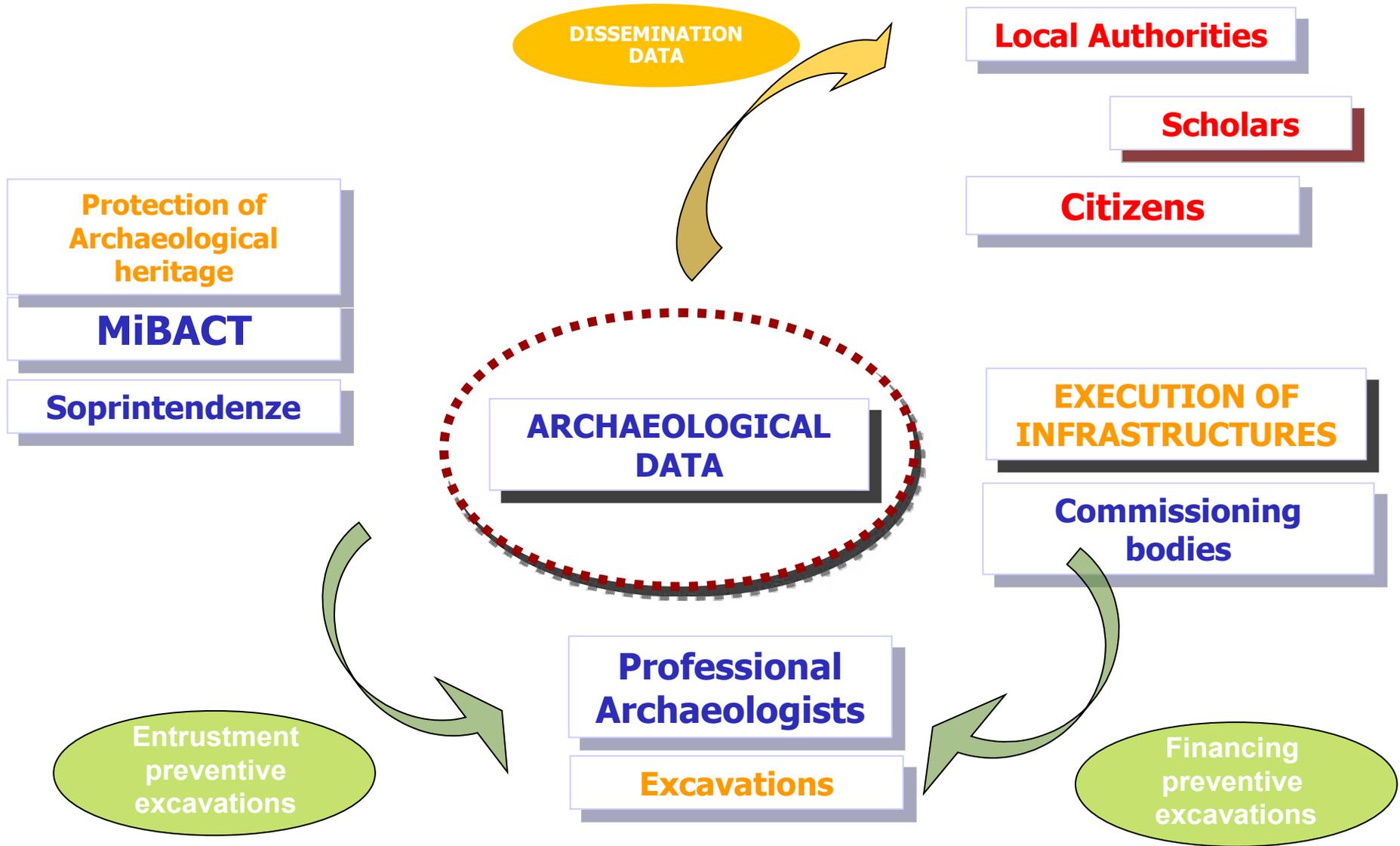
**D.Lgs. 33/2013:** RE-ORGANIZATION OF REGULATION CONCERNING OBLIGATIONS OF ADVERTISEMENT, TRANSPARENCY AND PUBLICATION OF INFORMATIONS BY THE PUBLIC ADMINISTRATIONS

**Faro Convention (1948)** ratified by Italy 27 FEBRUARY 2013



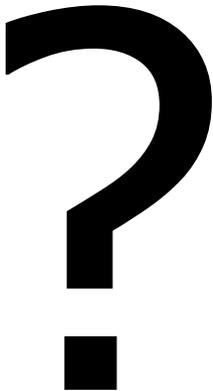
Numerous legislative measures enacted in recent years converge on the need of **sharing data** owned, organized and managed by the **Public Administration**

# The actors of the production, dissemination and reuse of data



## Some key Questions

- 1-** Have the documents produced by professional archaeologists paid by private companies, but under the scientific direction of the Soprintendenza, to be considered **creative works** and then subject to copyright protection?
- 2-** Is it possible to recognize in them the nature of novelty and originality required to **creative works**?
- 3-** If the answer is affirmative, is it sufficient to recognize the **moral rights of the authors**?
- 4-** Is it possible, on the contrary, to consider these documents as **public ones**, as the result of a work commissioned by a **public body** in the performance of his official duties, and so to exclude them from the copyright protection?



# The phases of the historical reconstruction

“L’archeologia si occupa delle civiltà passate per ricostruire, partendo dai dati materiali, le relazioni che uomini e società stabilirono fra di loro e con l’ambiente.

L’archeologia mira a riconoscere le tracce lasciate dalla presenza umana in un territorio, nelle stratificazioni sepolte o alla superficie del suolo e a comprendere in tal modo le diverse civiltà negli aspetti più vari della loro cultura materiale, come delle più alte manifestazioni artistiche.

I resti archeologici non trasmettono tuttavia in linea generale un messaggio diretto; la loro interpretazione richiede un complesso percorso di indagine scandito dalle tappe della individuazione, della raccolta, della descrizione e dell’organizzazione dei dati, che possono garantire il raggiungimento di un’interpretazione storicamente valida.

Alle soglie del nuovo millennio l’archeologia interpreta alcune esigenze primarie della società, quali la natura razionale del sistema di conoscenze, la globalità delle forme del sapere, la necessità dell’incontro tra umanesimo e scienza, anche in funzione della salvaguardia dell’ambiente e della sua valorizzazione. I beni archeologici, intesi come prodotti del lavoro e del pensiero umano, svolgono una funzione insostituibile per la loro capacità di conservare e trasmettere i valori che riproducono la nostra cultura e le consentono di trasformarsi consapevolmente.”

D. Manacorda, *Il Mondo dell’Archeologia*, Enciclopedia Treccani

## Identification - Collection

Origin of the Information

ORIGIN



## Description

Archaeological Part

ANALYSIS



## Organization

Archaeological Unit

SYNTHESIS -  
INTERPRETATION



## Historical Reconstruction

Complete Edition

INTERPRETATION

# The authorship in online platforms

**Scheda Origine Informativa 754**

Codice SITAR:

Ente Proprietario: Soprintendenza Speciale per i Beni Archeologici di Roma

Funzionario responsabile: Mirella Serlorenzi

Metodologie di indagine: Ricerche geognostiche invasive

Data avvio:

Data fine:

Equipe scientifica: Oberdan Menghi

Soggetto richiedente: MADI S.r.l.

Soggetto esecutore: Geoter S.r.l., Socori Srl

Descrizione lavori: Sondaggi geognostici realizzati a scopo di accertamento archeologico nell'ambito delle opere di ricostruzione e recupero funzionale dell'edificio ubicato fra le vie Emanuele

Indici documentali:

Tipo	Protocollo	Data	Ente emittente
Consegna documentazione	9542	30/03/2...	Soprintendenza Speciale...

Comune: Roma

Ripartizione amministrativa: Municipio Roma I (già I municipio) dal 11/03/13

Località: Esquilino

Indirizzi:

Via	Civico
PIAZZA VITTORIO EMANUELE	N.D.

Grado georeferenz.: certa

Metodo di georeferenz.: base catastale vettoriale (versione anno 2004)

Grado di rappresent.: dettagliata

Creato da: Cristiana Cordone



## Archeologia e Calcolatori

CNR - DIPARTIMENTO SCIENZE UMANE E SOCIALI, PATRIMONIO CULTURALE  
ISTITUTO DI STUDI SUL MEDITERRANEO ANTICO  
JOURNAL ESTABLISHED BY: Mauro Cristofani and Riccardo Francovich - EDITOR: Paola Moscati

**Menu**

- Home Page
- About the Journal
- Editorial Staff
- Author Guidelines
- Index by Year
- Supplements
- Special Issues
- Search
- Image Gallery
- OASistema
- Credits and Contacts
- 20th Anniversary

**Supplements**



**Archeologia e Calcolatori** is a peer reviewed open access journal

Since 1990 Archeologia e Calcolatori (ISSN 1120-6861, e-ISSN 2385-1953) has been an international observatory of theoretical and methodological aspects characterise the journal in the international panorama: the multilingualism, the dialectical relationship between theory and techniques and methods through tangible archaeological results.

Periodical publication of special thematic issues and conference proceedings allows readers to appreciate the ongoing evolution of the archaeology reconstructing the past. Since 2007 a new series of Supplements to the journal (ISSN 2385-202X, e-ISSN 2385-2038) has also been published.



Computing and Archaeology

Language >>>

# FASTIONLINE

HOME | CHI SIAMO | VOLUNTEER | CONTATTO | RICERCA | FOLD&R

Ricerca  vai

Un database di scavi archeologici condotti dal 2000



Per usare il database di una nazione clicca sulla mappa | Vai alla nazione

**Gli ultimi 5 FOLD&R pubblicati**

324 - Antonia Anoldus Huyzenveld, Cinzia Morelli, Patrizia Tuni. 2015. Il paleoambiente di Monte Giulio e della parte nord-orientale del bacino portuale di Claudio.

323 - Alessia Savi Scarpioni. 2014. Prima interpretazione di rinvenimenti di epoca etrusca e tarso-ellenistica in territorio vulcente Farnese (Viterbo), loc. Chiesa del Sello.

322 - Alex Walthall, Randall Souza, Jared Benton, James F. Huemoeller. 2014. Preliminary Report on the 2013 Field Season of the American Excavations at Morgantina. Contrada Agnese Project (CAAP).

321 - Eric E. Poehler, Steven J.R. Ellis. 2014. The 2013 Season of the Pompeii Quadriporticus Project: Final Fieldwork and Preliminary Results.

320 - Alessandro Sebastiani. 2014. Svolentino (Albano - GR). The 4th

**The latest Fasti site video**

Fasti Online: AIRC Excavations in the Pa...



Il progetto è finanziato da: Ministero dei Beni Culturali e Ambientali (MIBAC), la Classical Association, la Society for Roman Studies, il Ukrainian Studies Fund of Harvard University e L - P - Archaeology

Web, GIS e Database creati da L - P - Archaeology

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What to do? **It's time to decide!**





*you can access the **SITAR WebGIS** at*

<http://sitar.archeoroma.beniculturali.it/>

<http://webgis.archeoroma.beniculturali.it/sitarmap/login.php>



[www.facebook.com/pages/SITAR-Sistema-Informativo-Territoriale-Archeologico-di-Roma](http://www.facebook.com/pages/SITAR-Sistema-Informativo-Territoriale-Archeologico-di-Roma)