

# The Digital Index of North American Archaeology (DINAA)



## & Open Context

# Unlocking the Anthropology in Archaeology with Linked Open Data

by Joshua J. Wells, Eric C. Kansa, Sarah W. Kansa, David G. Anderson, Stephen J. Yerka, Kelsey N. Myers, R. Carl Demuth, and Thad Bissett

*This presentation and all other DINAA posters and papers from other venues are available through the DINAA blog <http://ux.opencontext.org/blog/archaeology-site-data>*



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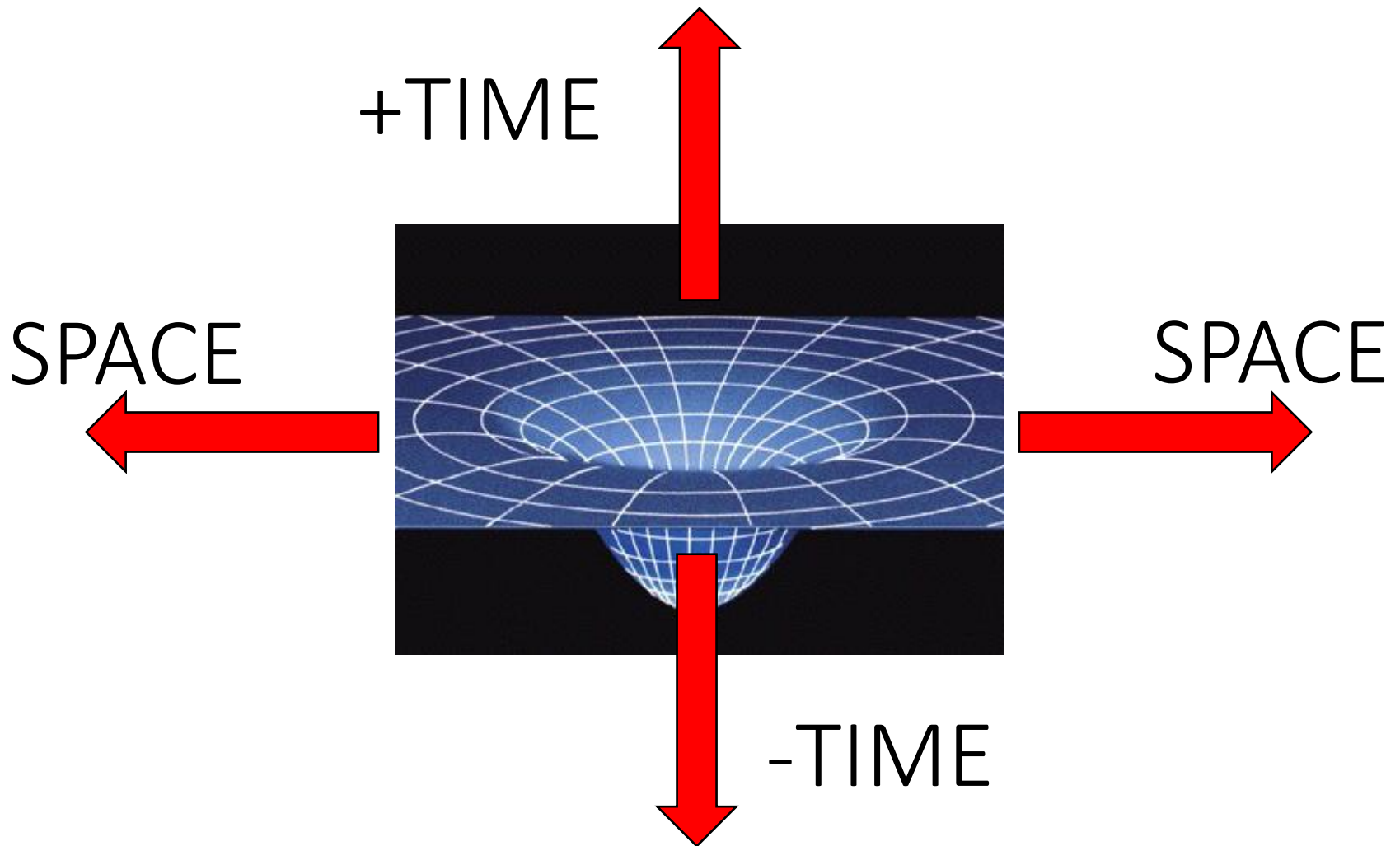


OPEN  
CONTEXT

PIDBA

Q: What is archaeology?

A: Context (and more ...)



# Disciplinary Issue 1/5

These data  
are dirty





# Disciplinary Issue 2/5



# Disciplinary Issue 3/5



How can we guarantee ...

... that these data are compatible?



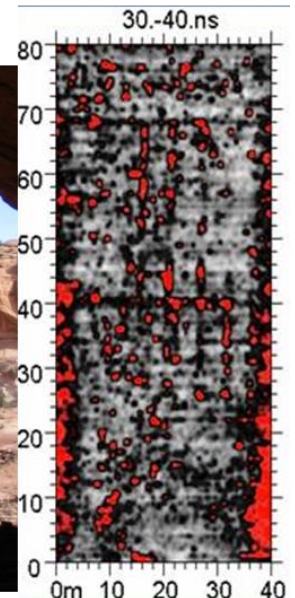
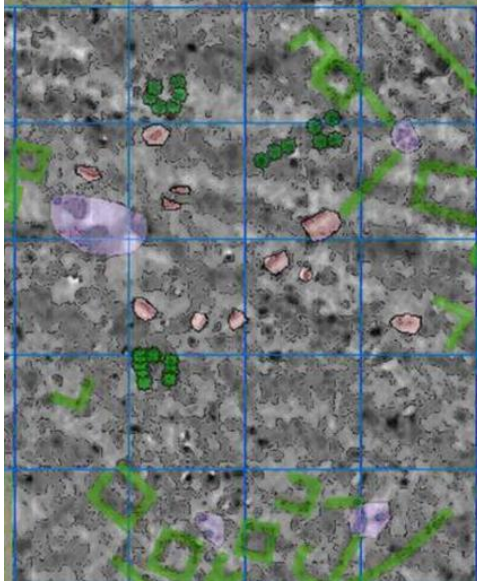
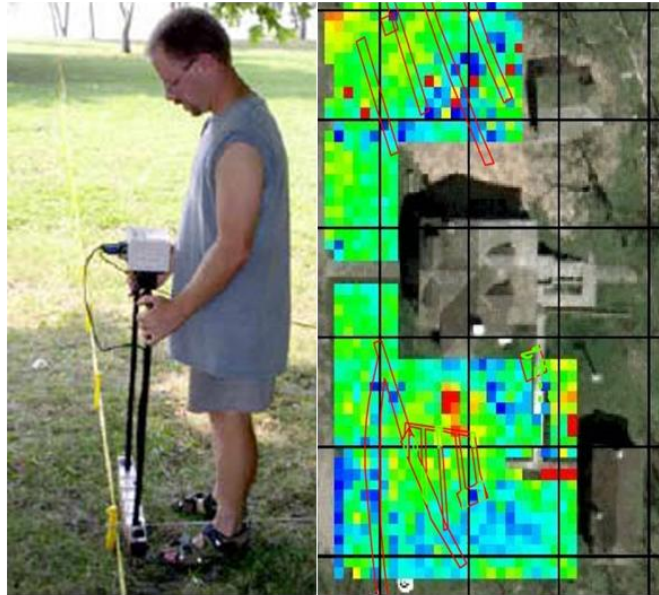


# Disciplinary Issue 4/5

magnetic gradiometer



electrical resistivity meter



# Disciplinary Issue 5/5

## Archaeologists explore Peruvian ruins with semi-autonomous drones

By Gene J. Koprowski / Published August 13, 2012 / FoxNews.com



Julie Adams and Steven Wernke with the SUAve aerial device. (ANNE RAYNER/VANDERBILT)

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### RELATED STORIES

- WikiLeaks site hit by weeklong attack
- UFO spotted over Antarctica?

Unmanned aerial vehicles (UAVs) aren't just terrorists in Yemen. Archeologists from Vanderbilt University are using the sophisticated [flying drones](#) to map the Andes Mountains of Peru from the skies.

The aerial scientific maps they are making with digital video footage of complex, ancient ruins are coming together, quickly, and leading to more discoveries about ancient cultures in the coming years, scientists tell FoxNews.com.

"With the UAV, we can fly over the site and capture the required imagery in about 10 minutes," Steve Wernke, an archeologist at Vanderbilt, who just completed photography of a site in Mawchu Llacta, a colonial town from the 1570s in the Andes, tells FoxNews.com. "Mapping a site of this scale would require about three entire field seasons and additional time during the

*"As UAVs become more prevalent, they appear to be an increasingly cost effective means of archaeological mapping."*

Gizmos have emergent data needs

The New York Times Business

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### Military Is Awash in Data From Drones

By CHRISTOPHER DREW  
Published: January 10, 2010

WILMINGTON, Va. — As the military rushes to place more spy [drones](#) in Afghanistan, the remote-controlled planes are producing so much video intelligence that analysts are finding it more and more difficult to keep up.

[Enlarge This Image](#)

Air Force drones collected nearly three times as much video over Afghanistan and Iraq last year as in 2007 — about 24 years' worth if watched continuously. That volume is expected to multiply in the coming years as drones are added to the fleet and as some start using multiple cameras to shoot in

Master Sgt. Demetrius Lester/U.S. Air Force

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THE SESSIONS NOW PLAYING



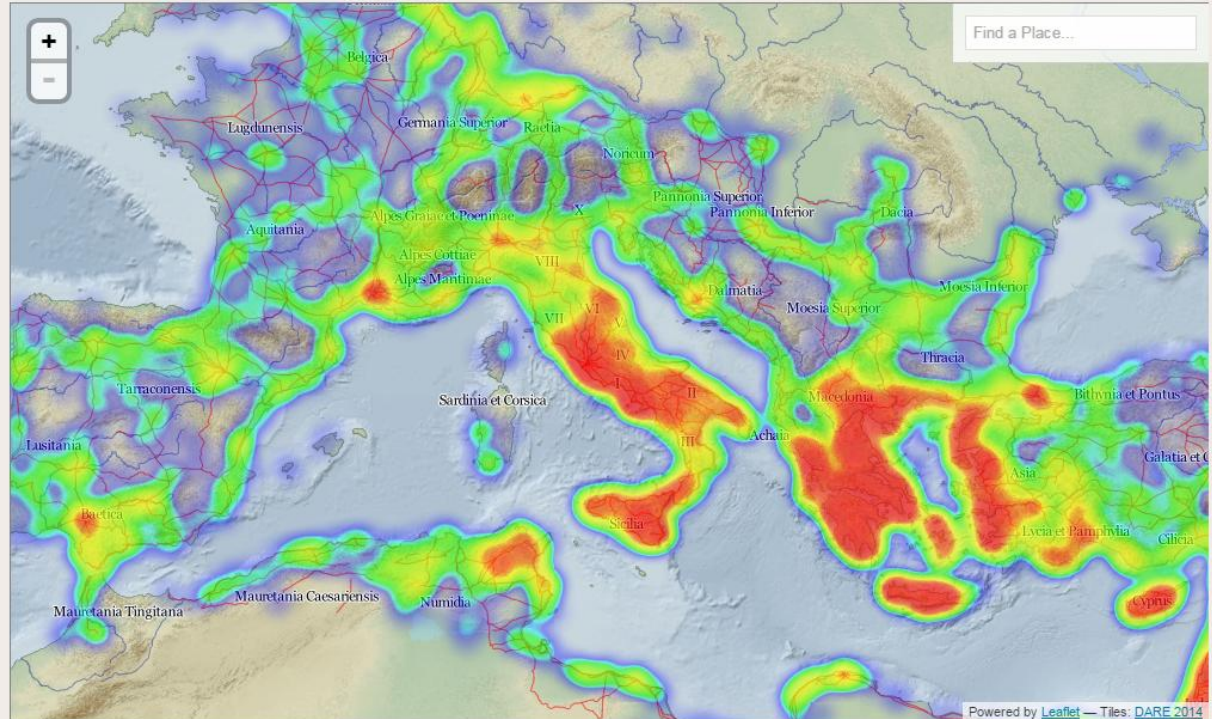
# Existing Infrastructure 1/7

## Discover Artifacts and Information Geographically through Pelagios

*Pelagios* is a collaborative effort involving [over 30 scholarly websites](#) about ancient art, archaeology, history, and literature. It is co-organized by scholars at the Open University, the University of Southampton, and the Austrian Institute of Technology. Participating projects use data from the [Pleiades gazetteer](#) to connect their contents geographically, making it easier for users to find information related to individual places in the ancient world.

The *Pelagios* heat map on this page can be zoomed and panned to focus on an area of interest. A single mouse click launches a popup for the closest place. "References" links on the popups will take you to pages on the *Pelagios* site summarizing the data available and giving you links to corresponding records on each partner project's site. You can also use the search box in the upper right-hand corner to find places on the map by name.

*Pelagios* phases 1 & 2, dedicated to classical antiquity (Greece and Rome) were funded by Jisc. *Pelagios* 3, which extends the methodology to cover medieval Christian, Islamic, and Asian geography, is funded by [The Andrew W. Mellon Foundation](#). You can read more about the scholarly functions of the project via "[Pleiades and Pelagios: Organizing Ancient Geography on the Web.](#)" Work in progress is discussed on the [Pelagios Project Blog](#).





# Existing Infrastructure 6/7



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Ariadne



## About Ariadne

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ARIADNE brings together and integrates existing archaeological research data infrastructures so that researchers can use the various distributed datasets and new and powerful technologies as an integral component of the archaeological research methodology. There is now a large availability of archaeological digital datasets

## Latest News

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## Tweets

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# Existing Infrastructure 3/7

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## Welcome to the Portable Antiquities Scheme website

The Portable Antiquities Scheme is a DCMS funded project to encourage the voluntary recording of archaeological objects found by members of the public in England and Wales. Every year many thousands of objects are discovered, many of these by metal-detector users, but also by people whilst out walking, gardening or going about their daily work.



### Micropasts

A community platform for conducting, designing and funding research into our human past. The Scheme's latest



### Search our database



### Latest tweets

- 3 days, 14 hours ago [findsorguk](#) said: A new crowdsourcing application on Micropasts features the



# Existing Infrastructure 4/7

## PIDBA

The Paleoindian Database of the Americas

[Home](#) [Introduction](#) [Database](#) [Maps](#) [Images](#) [Dating](#) [References](#) [Contact](#)

### New to PIDBA!

#### Artifact Images

[Alabama](#)  
[Florida](#)  
[Georgia](#)  
[Pennsylvania](#)  
[Mississippi](#)  
[South Carolina](#)  
[Tennessee](#)

[More info...](#)

### Paleoindian Site Dates

[SE Radiocarbon Dates](#)


### Got Data?

Click [here](#) to learn how to contribute your data to the project.

### Cite

Learn how to properly cite the maps and the data found on this site and other questions [here](#).

Click [here](#) to access the data from the **Report: Survey of the Professional Opinions Regarding the Peoplings of the Americas** by Amber D. Wheat.



A map of the Americas, including North and South America, with state and national boundaries outlined. The map is rendered in a light purple/blue color.

### PIDBA SAA 2009 Poster

[More](#)

### Distribution Maps

#### Currently Available for:

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# Existing Infrastructure 2/7



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DATA SERVICE

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Supporting research,  
learning and teaching  
with free, high quality and  
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resources

Welcome to the ADS website. There are a number of features of the website that will make it easier and more enjoyable to use. Please read the 'About' this site section for more details. This site works best with the Firefox, Chrome and Safari browsers. Why not register as a myADS user to take full advantage of the additional features. On registration these personal myADS features become available.

## Workbook

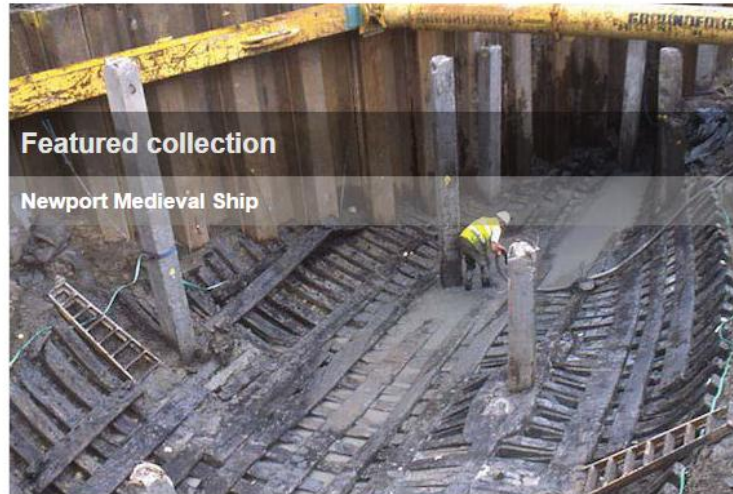
Using the tools at the bottom of each page save your favourite resources and regular searches in the myADS Workbook.

## History

Your recent exploration of the site and the archives is automatically saved in your myADS History.

## Additional services

Registered ADS users can take advantage of a number of additional myADS services, such as tailored email alerts and download of configurable results sets.



## Featured collection

### Newport Medieval Ship

## October 2014: Digital Data Re-use Award

Internet Archaeology and the Archaeology Data Service have teamed up to provide an Award that recognises the outstanding archaeological research being carried out through the re-use of digital data. The Digital Data Re-use Award offers archaeological researchers the chance to promote their work and win the opportunity to publish, free of charge, in the premier open access journal Internet Archaeology. [more](#)



## October 2014: ADS Update: Issue 5

Issue 5 of ADS Update our quarterly e-newsletter is out now, with articles on Internet Archaeology Going Open Access, our new Digital Data Reuse Award, the new ADS Guidelines for Depositors, and an update on the HERALD project as well as much more. [more](#)



## October 2014: Marie Curie post doctoral fellow Fabrizio Galeazzi joins ADS and the Centre for Digital Heritage

This term ADS are pleased to welcome Fabrizio Galeazzi, a new Marie Curie post doctoral fellow, who will be working with us and Centre for Digital Heritage. Fabrizio comes to York having received a BA and MA in Archaeology at the University of Rome "La Sapienza", specializing in Late Antiquity and Medieval Archaeology, and a Ph.D. in World Cultures/Heritage at the University of California, Merced. [more](#)





# Existing Infrastructure 5/7



## Federated Archaeological Information Management Systems Project

Creating eResearch tools for archaeologists

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### FAIMS Mentioned in Intersect Monthly Newsletter

Posted on 2 July 2014 by Brian Ballsun-Stanton

FAIMS was featured in Intersect's monthly bulletin with a lovely short summary of our project:


*The FAIMS application has the capability to radically improve the workflow of archaeology. The Federated Archaeological Information Management System (FAIMS) includes an Android application and Ruby server built by Intersect. It is a comprehensive information system, built for the digital collection and management*

JOIN THE FAIMS COMMUNITIES!

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#### FAIMS Mobile Application

A community of beta FAIMS Mobile App Users!

 Preview Community

 98 members

- [General Discussion](#)
- [Mobile Application Usergroup](#)

ARCHIVES

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# Existing Infrastructure 7/7



**What can you dig up?**  
The Digital Archaeological Record (tDAR) is your online archive for archaeological information.

mississippian  advanced

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## Access & Use

Broadening the access to archaeological data through simple search and browse functionality.

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## Contribute

Contribute documents, data sets, images, and other critical archaeological materials.

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## Preservation

Dedicated to ensuring long-term preservation of digital archaeological data.

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## Who Uses tDAR

Researchers like you. Uncover knowledge of the past, and preserve and protect archaeological resources.

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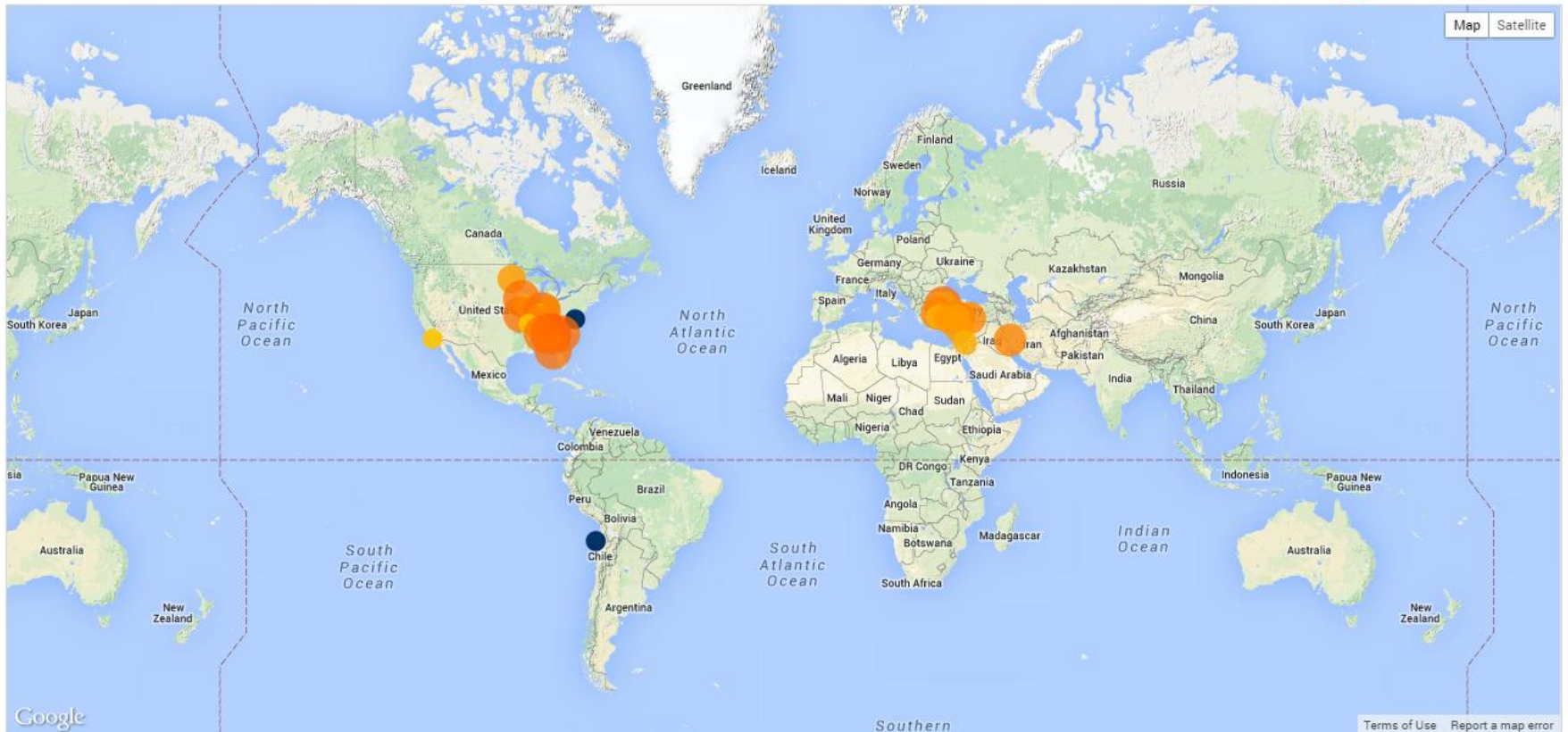
## Welcome to Open Context

Open Context reviews, edits, and publishes archaeological research data and archives data with university-backed repositories, including the California Digital Library.

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### Content Map and Timeline

Number of Records 50  150,000  (Forthcoming)

Timeline and mapping credit: Timemap.js library by Nick Rabinowitz using Timeline by the SIMILE Project



Web-based research data publication

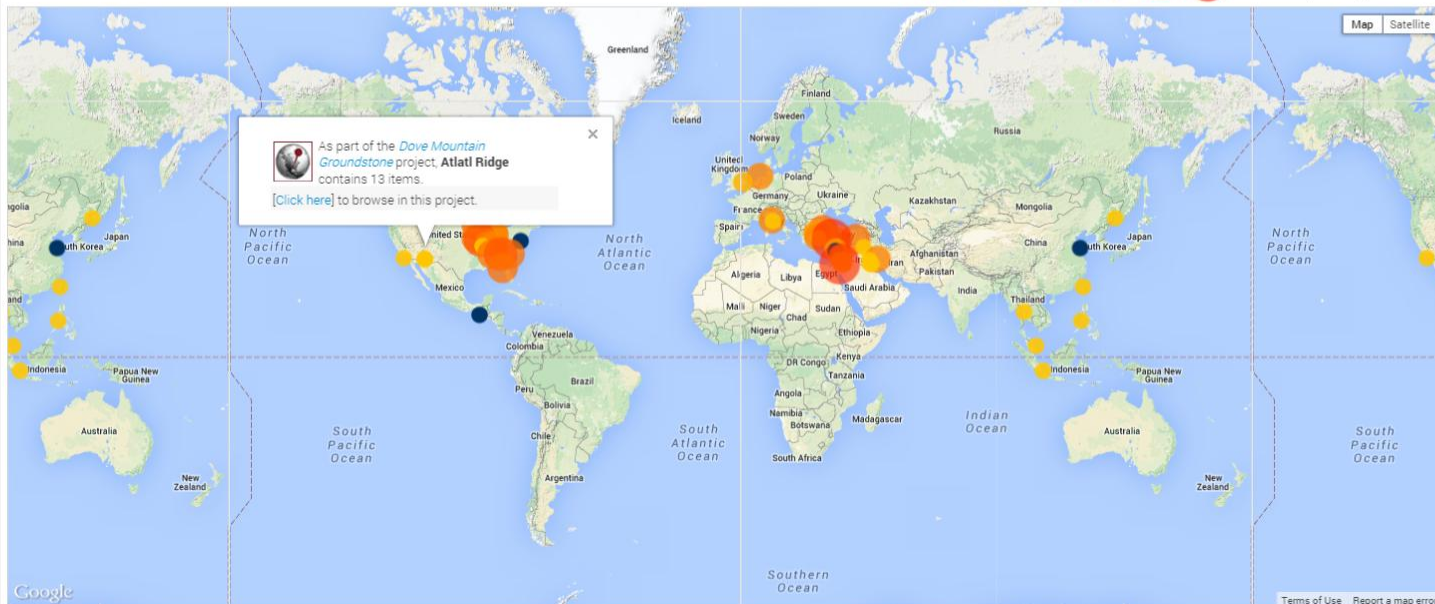
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## Content Map and Timeline



 As part of the *Dove Mountain Groundstone* project, **Atlal Ridge** contains 13 items.  
[\[Click here\]](#) to browse in this project.

Timeline and mapping credit: Timemap.js library by Nick Rabinowitz using Timeline by the SIMLE Project



Web-based research data publication

### Browse and Filter

Click on one of the links below to further limit your view of analytic data in Open Context.

Or, type a search term in the box

Search here...

SEARCH

Sort facets alphabetically: A,B,C ↓

- Context
  - Select Multiple
  - Desert Tortoise 173
  - Wild Burro Canyon 63
  - Ruelas Canyon 39
  - Atlatl Ridge 13
  - AA:12:783 2
  - AA:12:787 2
- Project
  - Dove Mountain Groundstone 298
- Category
  - Select Multiple
  - Groundstone 226
  - Feature 66
  - Site 6
- Items with Media
  - Images 33

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Some data in Open Context uses shared terminology systems published by experts in various fields:

- [Browse Items with biological taxa](#) (from [Encyclopedia of Life](#))
- [Browse Items linked to ancient places](#) (from [Pleiades](#))
- [More about Linked Data in Open Context](#)

Open Context currently has 298 items, filtered by the following criteria:

(1) Contained in: [United States / Arizona](#)

(2) Project (by ID): Dove Mountain Groundstone

Last Updated: September 7, 2013, 8:45 am

[US-state site files](#), [Map with point icons](#), [Map of tile regions](#), [Summary on Google maps](#)

Page 1 of 30, sorted by Interest score (desc)

Sort By: Context Project name Item label Updated time Publication time

	Dove Mountain Groundstone	Groundstone <a href="#">Object 427</a> Context: <i>United States / Arizona / Desert Tortoise / Feature 1</i>	
	Dove Mountain Groundstone	Groundstone <a href="#">Object 1105</a> Context: <i>United States / Arizona / Desert Tortoise / Feature 148</i>	
	Dove Mountain Groundstone	Groundstone <a href="#">Object 721</a> Context: <i>United States / Arizona / Wild Burro Canyon / Feature 5</i>	
	Dove Mountain Groundstone	Groundstone <a href="#">Object 1595</a> Context: <i>United States / Arizona / Desert Tortoise / Feature 0</i>	
	Dove Mountain Groundstone	Groundstone <a href="#">Object 956</a> Context: <i>United States / Arizona / Wild Burro Canyon / Feature 76</i>	





**Item: Object 427**  
**Class: Groundstone**

Project: **Dove Mountain Groundstone**  
Number of Views: 102

Context (click to view): [United States / Arizona / Desert Tortoise / Feature 1](#)

Descriptive Properties (16)

Variable	Value
Site Identifier	AA:12:83
Feature Type	Pithouse
Context	Floor
Field Number	427
Artifact Type	metate
Artifact Subtype	3/4 basin
Condition	whole
Burned	yes
Design	expedient
Use	multiple
Sequence	sequential
Wear	heavy
Designed Activity	Food processing
Actual Activity	Food processing
Rock Type	-
Time Period	A.D.500-1150

Item Notes

Data presented in this project primarily concern ground stone finds. More complete documentation of sites, archaeological features, research methods, etc. can be obtained from Swartz 2008. Raw data and the artifacts are stored at the Arizona State Museum.

Linked Persons / Organizations (1)

[Jenny Adams](#), Principle Author / Analyst

Project Editorial Status

●●●○ Editorial board reviewed

Suggested Citation

Jenny Adams. "Dove Mountain Groundstone: Object 427 (Groundstone)" (Released 2010-04-29). Jenny Adams (Ed.) Open Context. <<http://opencontext.org/subjects/75682CFA-77DA-4A15-E801-DF48CA8DB2E5>>

Mapping Data



Editorial Description (1)

(500 CE - 1150 CE)

Editor's Note: Date ranges are approximate and do not necessarily reflect the opinion of data contributors. These dates are provided only to facilitate searches.

Downloadable Tables with this Item

[Dove Mountain Groundstone](#)

Linked Media (2)





Web-based research data publication

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Search

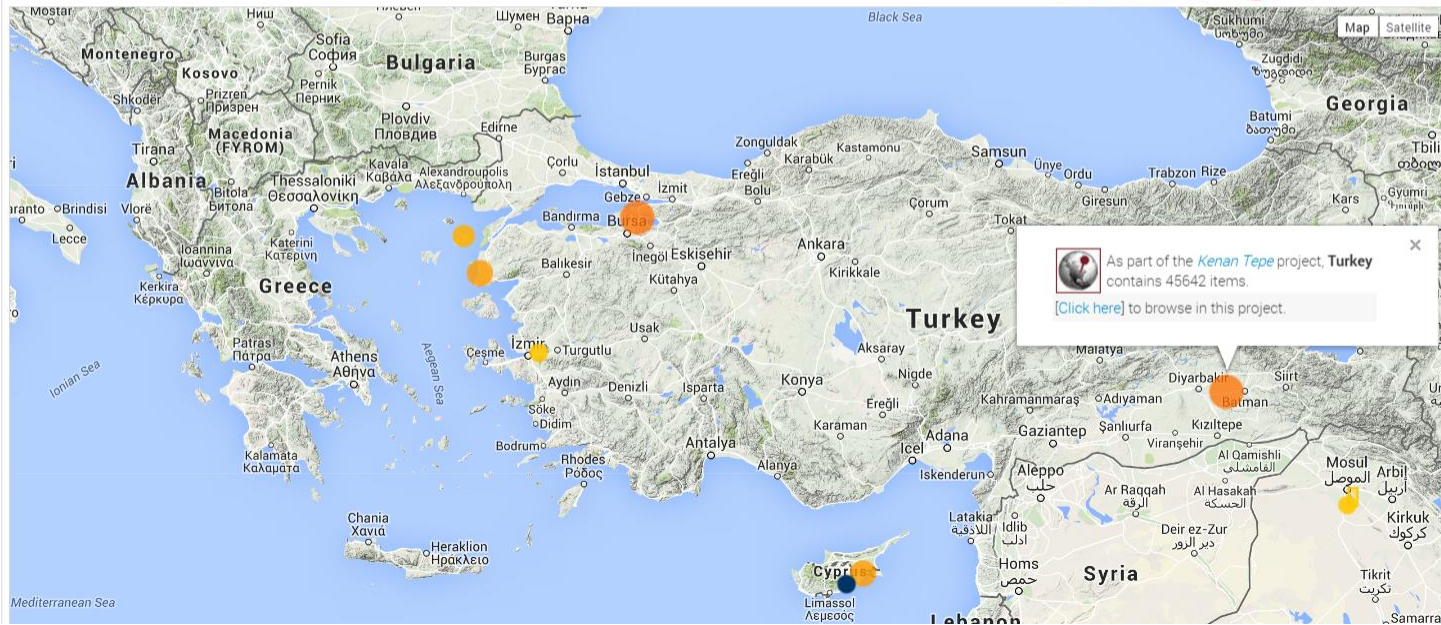
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## Content Map and Timeline



### Browse and Filter

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Sort facets alphabetically: A,B,C ↓

- Context
  - Turkey 45642
- Project
  - Kenan Tepe 45642
- Category
  - Select Multiple
  - Sample 22542
  - Animal Bone 9542
  - Pottery 8146
  - Locus 3280
  - Objects 1764
  - Plant Remains 290
  - Trench 68
  - Area 9
  - Site 1
- Items with Media
  - Images 8466
  - Other 1
  - Diary 3168

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Some data in Open Context uses shared terminology systems published by experts in various fields:

- Browse Items with **biological taxa** (from [Encyclopedia of Life](#))
- Browse Items linked to **ancient places** (from [Pleides](#))
- [More about Linked Data in Open Context](#)

Open Context currently has **45642** items, filtered by the following criteria:

(1) Project (by ID): Kenan Tepe

Last Updated: November 26, 2013, 2:10 am

[US-state site files](#), [Map with point icons](#), [Map of tile regions](#), [Summary on Google maps](#)

Page 1 of 4565, sorted by Interest score (desc)

	Context	Project name	Item label	Updated time	Publication time
	Kenan Tepe	<b>Trench</b> <a href="#">Trench 2</a>	Context: <a href="#">Turkey</a> / <a href="#">Kenan Tepe</a> / <a href="#">Area A</a>		
	Kenan Tepe	<b>Trench</b> <a href="#">Trench 7</a>	Context: <a href="#">Turkey</a> / <a href="#">Kenan Tepe</a> / <a href="#">Area F</a>		
	Kenan Tepe	<b>Trench</b> <a href="#">Trench 6</a>	Context: <a href="#">Turkey</a> / <a href="#">Kenan Tepe</a> / <a href="#">Area D</a>		
	Kenan Tepe	<b>Trench</b> <a href="#">Trench 5</a>	Context: <a href="#">Turkey</a> / <a href="#">Kenan Tepe</a> / <a href="#">Area D</a>		



**Item: Trench 2**  
**Class: Trench**

**Project: Kenan Tepe**  
**Number of Views: 435**

Context (click to view): [Turkey / Kenan Tepe / Area A](#)

**Descriptive Properties (5)**

Variable	Value
Trench Length (m)	15
Trench Width (m)	3
Year	<ul style="list-style-type: none"> <li>2000</li> <li>2001</li> <li>2002</li> </ul>
Description	Trench A2 is a 3 by 15 meter excavation unit forming the upper-most third of our step trench. This trench begins at the top of Kenan Tepe's main mound and continues down the steep northern slopes of this part of the site. This trench revealed small pieces of architecture and other remains dating to a number of periods throughout Kenan Tepe's cultural history. Highlights include part of a large wall and pavement dating to the Middle Bronze Age and part of the upper-most Early Bronze Age fortification/retaining wall that was also identified in area C and in our remote sensing survey.
Tentative Dating	Multiple

**Item Notes**

A trench is the projection of a 2D square or rectangle onto some small portion of an Area. This projection is usually excavated vertically, leaving a one-half meter space between the vertically excavated space and the edge of the trench so that a standing section, or baulk, is left as a record of the trench stratigraphy. Generally speaking, trenches fit into the north-south grid established on the site. The exception is where the site topography does not allow a trench to be oriented to the cardinal points. Trench corners were located using a total station and secured with cement. The location of all excavated material within a trench was measured relative to the actual (cemented) corners of the trench. Various sized trenches were excavated at Kenan Tepe including 1 x 1 and 2 x 2 meter soundings and 3 x 5, 5 x 5, 5 x 10 and 10 x 10 meter trenches. One or two students were typically placed in control of a trench as "trench supervisors." Trenches also typically had between 1 and 4 local laborers. Area supervisors oversaw trenches in each area. Trench supervisors were responsible for recording the excavation and for directing the local laborers. This included keeping a daily journal that recorded observations and activities in each trench, drawing daily plans showing the location of excavated contexts, taking photographs and issuing loci and finds bag numbers. Area supervisors oversaw excavation and sampling strategies and guided trench supervisors in excavation procedures and interpretation.

**Project Editorial Status**

●●●● Editorial board reviewed

**Suggested Citation**

Bradley Parker, Peter Cobb. "Kenan Tepe: Area A / Trench 2 (Trench)" (Released 2012-03-28). Bradley Parker, Peter Cobb (Eds.) Open Context. <<http://opencontext.org/subjects/FC96A49E-FE12-488B-4EFF-02D4E147B885>>

**Mapping Data**



**Linked Media (199)**







### Browse and Filter

Click on one of the links below to further limit your view of analytic data in Open Context.

Or, type a search term in the box

Search here...

Sort facets alphabetically: A,B,C |

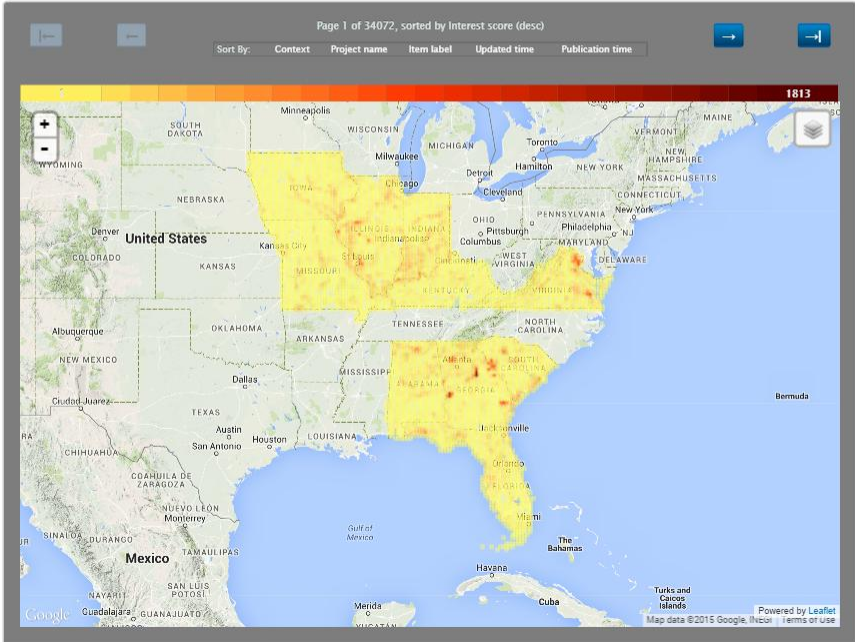
- DINAA linked period
  - Select Multiple
  - Prehistoric (DINAA Vocabulary) 123544
  - Historic (DINAA Vocabulary) 120059
  - Woodland (DINAA Vocabulary) 63805
  - Archaic (DINAA Vocabulary) 55994
  - Uncategorized (DINAA Vocabulary) 55433
  - Late Prehistoric (DINAA Vocabulary) 18901
  - Paleoindian (DINAA Vocabulary) 3342
  - Protohistoric (DINAA Vocabulary) 388
  - Contact Period (DINAA Vocabulary) 127
- Descriptive Properties
  - Select Multiple
  - Period 214812
  - Site type 132984
  - Site Type 84537
  - Revised 81443
  - HISURF 54867
  - Historical diagnostic 54867
  - PRESURF 54867
  - Site condition 54867
  - Prehistoric diagnostic 54865
  - NRHP listed 54767
  - Coordinate system 52807
  - Deleted 52807
  - More...
- Context
  - Select Multiple
  - Illinois 54744
  - Georgia 52807
  - Virginia 39358
  - Indiana 38307
  - Florida 32527
  - Alabama 27491
  - Iowa 26558
  - Missouri 28521
  - South Carolina 25739
  - Kentucky 16481
  - More...
- Project
  - Select Multiple
  - DINAA Projects
    - Illinois Site Files 54869
    - Georgia Archaeological Site File (GASF) 52807
    - Virginia Site Files 39358
    - Indiana Site Files 39010
    - Florida Site Files 32527
    - Alabama Site Files 27491
    - Missouri Site Files 20575
    - Iowa Site Files 20520
    - South Carolina SHPO 25739
    - Kentucky Site Files 15812
- Category

Open Context currently has 340717 items, filtered by the following criteria:

- (1) Contained in:  [X]
- (2) Geo-spatial Tile:  [X]
- (3) DINAA time period:  [X]

Last Updated: July 31, 2014, 12:28 pm

[US-state site files](#), [Map with point icons](#), [Summary on Google maps](#)

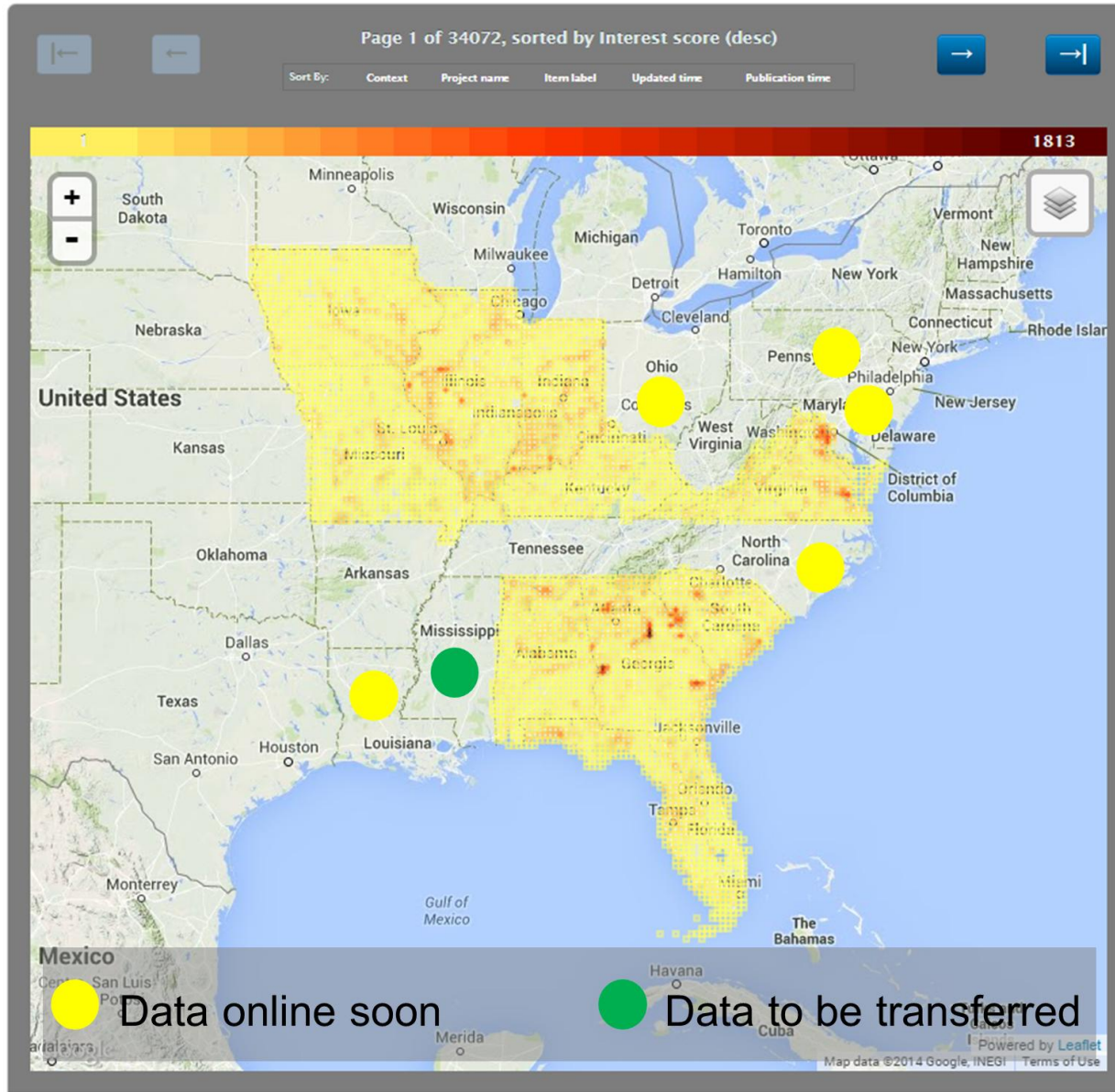




# WHAT IS DINAA?

- **ontology & index for linked data**
  - heuristic potential
  - regional geospatial potential
- **communication process**
  - agencies
  - researchers
  - educators
  - publics
- **DINAA uses**
  - open source software and principles
  - public revisions
  - data as they exist (and adds value)

# #OpenGov #OpenSci Base Data of DINAA



**Vocabulary: Digital Index of North American Archaeology Vocabulary**

**Label** Digital Index of North American Archaeology Vocabulary

**Note** This ontology supports integration of data compiled by different State Historical Preservation Offices (SHPOs) for the Digital Index of North American Archaeology (DINAA) project (see: <http://lux.opencontext.org/blog/archaeology-site-data/>) It was developed through support from the National Science Foundation (Grants: NSF #1216810 and #1217240).

**URI** <http://opencontext.org/vocabularies/dinaa>

**Concept Hierarchy**  
This vocabulary ontology describes a hierarchy of concepts as illustrated below:

- **Period**
  - Paleoindian
    - Clovis
    - Folsom
    - Early Paleoindian
    - Late Paleoindian
      - Dalton
      - Late Paleoindian / Early Archaic
    - Cumberland
    - Pre-Clovis
  - Archaic
    - Late Archaic
      - Bluegrass
        - Middle / Late Archaic
      - Terminal Late Archaic
    - Early Archaic
      - Big Sandy
    - Middle Archaic
  - Woodland
    - Early Woodland
      - Adena
    - Middle Woodland
      - Crab Orchard
    - Late Woodland

**Vocabulary Review Status**  
Not reviewed

**Suggested Citation**  
Joshua Wells, David G. Anderson, Stephen Yerka, Sarah Wiltcher-Kearns, Eric C. Keane. "Digital Index of North American Archaeology Vocabulary" (Updated 2014-06-15). Open Context! <<http://opencontext.org/vocabularies/dinaa>>

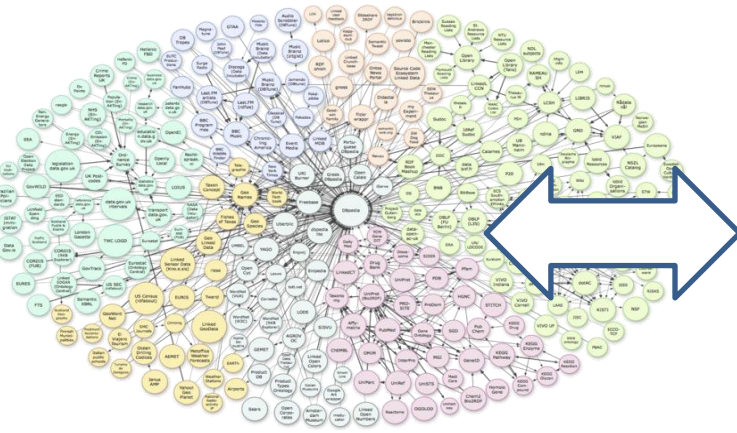
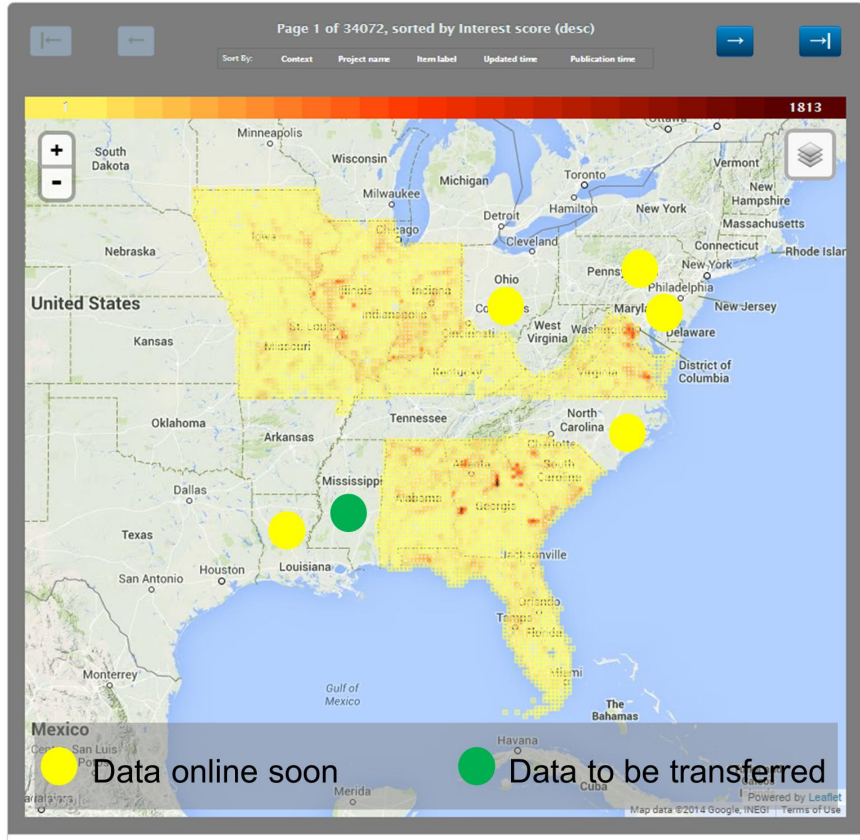
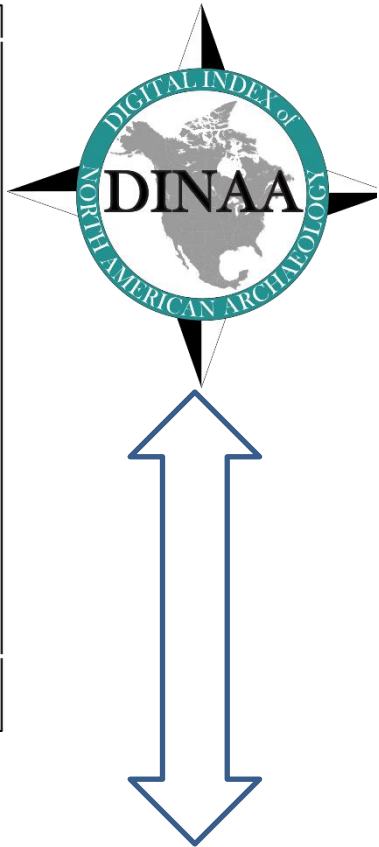
**Linked Media**  
Version-control (Github, OWL File)

**Vocabulary Updates**

- Minor edits
- Added Pre-clovis culture
- Removed redundant Paleo period
- Fixed IRI digit prefix for new entity

GET THE CHANGES FEED

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**github**  
SOCIAL CODING

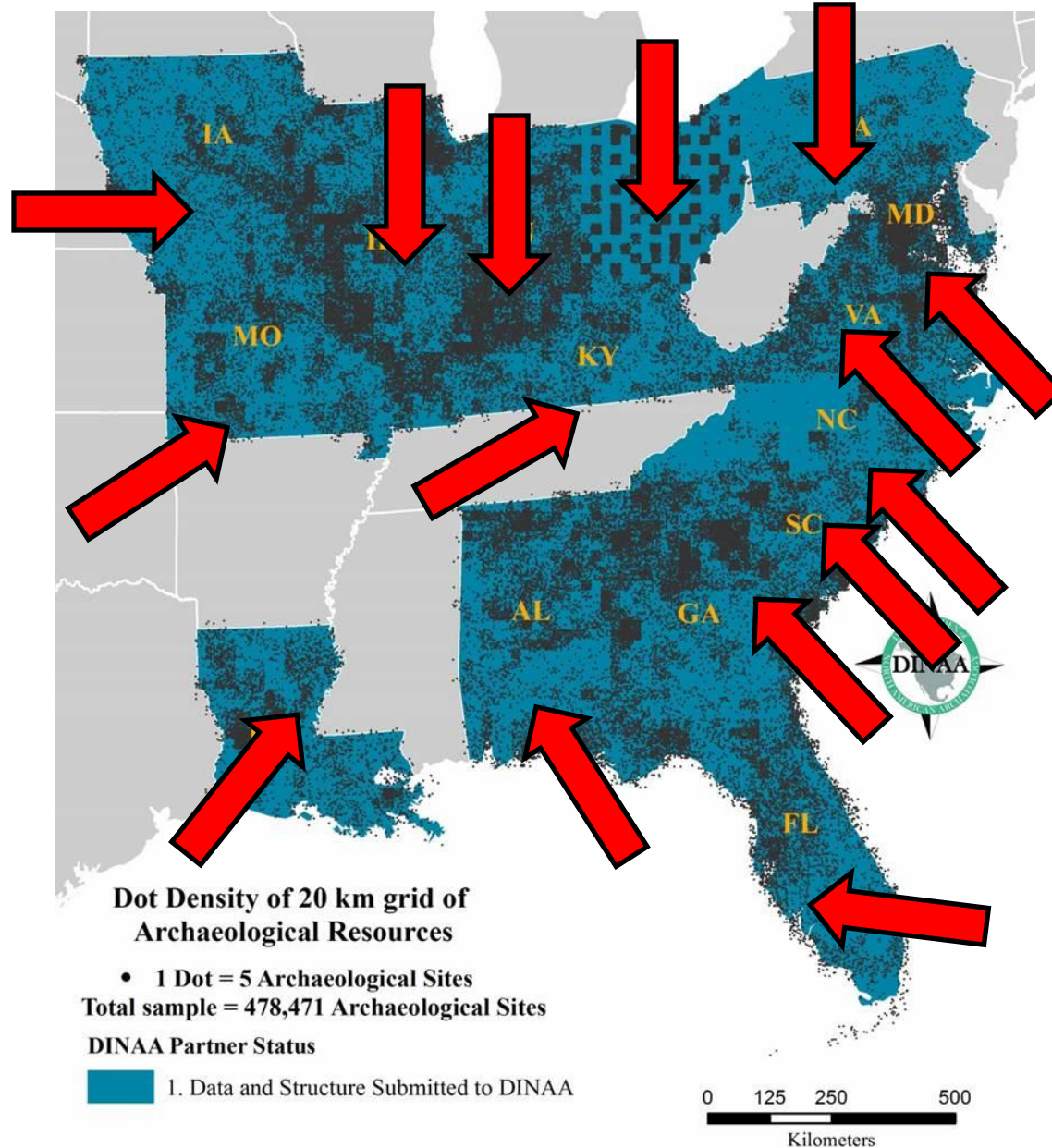


**http://**  
**Google**  
**CDL**





# DINAA in Practical Context



# DINAA BASELINE

- where do these data originate?
- what kinds of data are these?

01011011  
01011101  
01101110  
10110101



**NORTH CAROLINA ARCHAEOLOGICAL SITE FORM VIII**  
Office of State Archaeology/Division of Archives & History

1. STATE SITE NUMBER: [ ]  
2. SITE NAME(S): [ ]  
3. OTHER SITE NUMBER: [ ]  
4. INSTITUTION ASSIGNING: [ ]  
5. PROJECT SITE NUMBER: [ ]  
6. SITE COMPONENT: [ ]  
7. QUAD MAP: [ ] MAP CODE: [ ]  
8. UTM: ZONE: [ ] NORTHING: [ ] EASTING: [ ]  
9. COUNTY: [ ] 10. DATE RECORDED: [ ]  
RECORDED BY: [ ]  
PROJECT NAME: [ ]  
11. RESULT OF COMPLIANCE PROJECT: [ ]  
12. ER CH GRANT#: [ ]  
13. CODING DATE: [ ] CODED BY: [ ]

**14-18. OFFICE OF STATE ARCHAEOLOGY USE ONLY**

14. Register Status: 1 DETERMINED ELIGIBLE 2 PLACED ON STUDY 3 APPROVED FOR LISTED IN REG 4 LISTED IN REG	5 REMOVED FROM REG 6 NOT ELIGIBLE 7 UNASSESSED 8 IN ARCH REC. PROG	14A. Register Criteria: A SIGNIFICANT - CRITERION A B SIGNIFICANT - CRITERION B C SIGNIFICANT - CRITERION C D SIGNIFICANT - CRITERION D	15. Type of Form: 1 SITE FORM VI	16. Recorder Status: 1 NCAC MEMBER 2 AMATEUR 3 UNKNOWN	4 OTHER 5 STUDENT
17. Form Reliability: 1 CODING FROM SITE 2 CODING FROM REG 3 CODING UNRELIABLE	18. Locational Reliability: 1 ACCURATE 2 RETURN 100% RADIUS 3 UNRELIABLE	4 UNKNOWN LOC 5 50% 100% RADIUS 6 75% 100% RADIUS	DIRECTIONS TO SITE: [ ]		

**ATTACH USGS OR OTHER DETAILED SITE MAP**

19. RESEARCH POTENTIAL: [ ]  
20. POTENTIAL IMPACTS ARTIFICIAL: [ ]  
21. POTENTIAL IMPACTS ENVIRONMENTAL: [ ]  
22. EXPLANATION OF IMPACTS: [ ]  
23. RECOMMENDATIONS: [ ]  
24. EXPLAIN RECOMMENDATIONS: [ ]  
25. DATE ON REGISTER: [ ]  
26. EXCAVATION DATE: [ ]  
27. INSTITUTION EXCAVATING: [ ]  
28. EXCAVATION RESULTS: [ ]  
29. PERCENT DESTROYED: [ ]  
30. DATE DESTROYED: [ ]  
31. CAUSES OF DESTRUCTION: [ ]

**ENVIRONMENTAL INFORMATION**

32. TOPOGRAPHIC SITUATION: [ ]  
33. ELEVATION: [ ] FT. AMSL  
34. SLOPE PERCENT: [ ] %  
35. SLOPE FACE DIRECTION: [ ]  
36. SOIL COMPOSITION: [ ]  
37. SCS SOIL TYPE CODE: [ ] SERIES NAME: [ ]  
ASSOCIATION: [ ]  
38. MODERN VEGETATION: [ ]  
39. DISTANCE TO WATER: [ ] (Meters) 40. [ ] (Yards)  
41. TYPE OF NEAREST PERMANENT WATER: [ ] NAME: [ ]  
42. STREAM BANK: [ ] (Stable System - 1-6)  
43. DRAINAGE BASIN: [ ]

**SITE EVALUATION AND CONDITION**

44. SITE CONDITION NATURAL: [ ]  
45. SITE CONDITION ARTIFICIAL: [ ]  
46. GROUND VISIBILITY: [ ] %  
47. COLLECTION MADE: [ ]  
48. COLLECTION STRATEGY: [ ]  
49. AREA COVERED SQ. METERS: [ ]  
50. SUBSURFACE TESTING: [ ]  
51. TESTING METHODS: [ ]  
52. SUBSURFACE TEST RESULTS: [ ]  
53. SITE SIZE: [ ]

**PREHISTORIC SITE INFORMATION**

54. PREHISTORIC COMPONENTS: [ ]  
55. PREHISTORIC SITE FUNCTION(S): [ ]  
56. MIDDEN: [ ]  
57. FAUNAL/ETHNOBOTANICAL REMAINS: [ ]  
58. FEATURE DESCRIPTION: [ ]  
59. LITHICS: [ ]  
1 Hafted Bifaces Projectile Pt.  
2 Bifaces  
3 Unifacial Tools  
4 Other Unifacial Tools  
5 Cores  
6 Primary Debitage  
7 Secondary Debitage  
8 Tertiary Debitage  
9 Ground Or Pocked Stone  
99 Other

59A. TOOL TYPES AND FREQUENCIES

1 - Clovis 2 - Hardaway Blade 3 - Hardaway-Dalton 4 - Hardaway Side-Notched 5 - Palmer Corner Notched 6 - Kirk Corner-Notched 7 - St. Albans Side-Notched 8 - LeCroy Bifurcated Stem	26 - Clarkville Small Triangular 27 - Pee Dee Pentagonal 28 - Randolph Stemmed 29 - PPt (Notched) 30 - PPt (Stemmed) 31 - PPt (Triangular) 32 - PPt Frax (Notched Stemmed) 33 - PPt Frax (Triangular)
---	--

NC Arch. Site Form IV - Page 2

## State Archaeological Site Files

Site Types

Diagnostic  
Artifact  
Descriptions

Culture  
History Terms

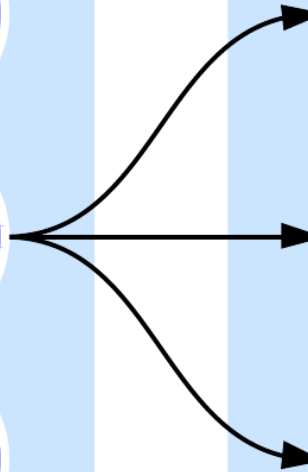
Other  
Important  
Cultural Data

## DINAA Translation File

DINAA  
Controlled  
Vocabulary

Radiocarbon  
Dates

Citations





# DINAA & LINKED DATA (record)

- DINAA data
  - stable URIs
  - sites
  - traits
  - concepts
  - updates
- links & citations
  - link back
  - publications
  - imagery
  - online data

**OPEN CONTEXT**  
Web-based research data publication

Home About Projects Browse Lightbox Tables Details Weblog

Item: **9CG111**  
Class: Site

Project: **Georgia SHPO**  
Number of Views: 1

Context (click to view): [United States / Georgia / Chattooga](#)

**Descriptive Properties (17)**

Variable	Value
GnahrGIS id	40551
Field number	GA01-263
Location accuracy	High
Coordinate system	NAD 1927 Zone 16N
Deleted	No
Period	Historic Non-Indian
Phase/Artifact	Nineteenth Century
Phase/Artifact	Stoneware
Phase/Artifact	Twentieth Century
Preservation Prospects	Endangered
Register Status	Recommended Ineligible
Endangered By	Unknown
Preservation State	Destroyed
Investigation Date	Apr 14 1993 12:00AM
Location of Collections	United States Forest Service
Location of Documentation	United States Forest Service
Site Type	House or Structure

**Project Editorial Status**  
Forthcoming

**Suggested Citation**  
"Georgia SHPO: 9CG111 (Site)" (Released 2013-10-15). Open Context. <<http://opencontext.org/subjects/0C20444F-3712-414A-5C99-CD6A558CD0AB>>

**Linked Media (0)**  
[ArchaeoML \(XML\) Version](#)  
[Version-control \(Github, XML Data\)](#)

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Required: Citation, and hyperlinks for online uses.

[New Publish on Local Server](#)  
[Update Publish on Local Server](#)  
[Commit Changes on Local Server](#)

[New Publish on Open Context](#)  
[Update Publish on Open Context](#)  
[Commit Changes on Open Context](#)

[Edit Properties, Notes, Etc.](#)

[Go to Project Publishing Page](#)

[Reorder Properties to Import Order](#)

NATIONAL ENDOWMENT FOR THE Humanities

INSTITUTE of Museum and LIBRARY SERVICES

THE WILLIAM AND FLORA HEWLETT FOUNDATION

# DINAA & LINKED DATA (ontology)

- DINAA data
  - stable URIs
  - sites
  - traits
  - concepts
  - updates
- links & citations
  - link back
  - publications
  - imagery
  - online data

The screenshot shows a web browser displaying the Open Context website. The page title is "Vocabulary: Digital Index of North American Archaeology Vocabulary". The page includes a navigation menu with links for Home, About, Projects, Browse, Lightbox, Tables, and Weblog. The main content area features a "Label" section with the text "Digital Index of North American Archaeology Vocabulary", a "Note" section describing the ontology's purpose and funding, and a "URI" section with the URL "http://opencontext.org/vocabularies/dinaa". A "Concept Hierarchy" section lists various archaeological periods and sites, such as Paleolithic, Archaic, and Woodland. On the right side, there are three informational boxes: "Vocabulary Review Status" (Not reviewed), "Suggested Citation" (providing author names and a citation link), and "Linked Media" (linking to version control and OWL files). Below these are "Vocabulary Updates" (listing recent changes) and "Copyright Licensing" (indicating Creative Commons Attribution license).

**Label** Digital Index of North American Archaeology Vocabulary

**Note** This ontology supports integration of data compiled by different State Historical Preservation Offices (SHPOs) for the Digital Index of North American Archaeology (DINAA) project (see: <http://lux.opencontext.org/blog/archaeology-site-data/>) It was developed through support from the National Science Foundation (Grants: NSF #1216810 and #1217240).

**URI** <http://opencontext.org/vocabularies/dinaa>

**Concept Hierarchy**  
This vocabulary ontology describes a hierarchy of concepts as illustrated below:

- **Period**
  - **Paleolithic**
    - Clovis
    - Folsom
    - Early Paleolithic
    - Late Paleolithic
      - Dalton
    - Late Paleolithic / Early Archaic
    - Cumberland
  - **Archaic**
    - Early Archaic (Generic)
    - Middle Archaic (Generic)
    - Late Archaic
      - Bluegrass
    - Middle / Late Archaic
    - Terminal Late Archaic
    - Late Archaic / Early Woodland
    - Early Archaic
      - Big Sandy
    - Middle Archaic
  - **Woodland**
    - Early Woodland
      - Adena
    - Middle Woodland
      - Crab Orchard
    - Late Woodland
      - Albee
      - Allison LaMotte
      - Brems
    - Terminal Middle Woodland
    - Late Woodland / Mississippian
  - Late Prehistoric

**Vocabulary Review Status**  
Not reviewed

**Suggested Citation**  
Joshua Wells, David G. Anderson, Stephen Yerka, Sarah Whitcher Kansa, Eric C. Kansa. "Digital Index of North American Archaeology Vocabulary" (Updated 2013-10-09). Open Context. <<http://opencontext.org/vocabularies/dinaa>>

**Linked Media**  
[Version-control \(Github, OWL File\)](#)

**Vocabulary Updates**

- Added numerous archaeological culture descriptors from Indiana
- added Middle Archaic (Generic)
- Added Generic Archaic label
- Fixed Early Archaic IRI

[GET THE CHANGES FEED](#)

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# DINAA & LINKED DATA (extensible)



OPEN CONTEXT

Web-based research data publication

Home

About ▾

Projects

Search and Browse ▾

Data Record

Search

Submit

Context: [United States](#) / [Florida](#) / [Walton](#) / **WL00068 (Site)**

Main Observation

Artifact Categories

Diagnostic Types

More ▾

Descriptions (5)

Descriptive Variable

Value(s)

Culture

- [Paleoindian, 10000 B.C.-8500 B.C.](#)
- [Archaic unspecified](#)
- [Early Archaic](#)
- [Archaic-Late](#)
- [Elliot's Point](#)
- [Deptford 700 B.C.-300 B.C.](#)
- [Santa Rosa-Swift Creek](#)
- [Weeden Island A.D. 450-1000](#)
- [Weeden Island II](#)
- [Mississippian](#)
- [Ft. Walton A.D. 1000-1500](#)
- [Pensacola](#)
- [American 1821-present](#)
- [Prehistoric-Ceramic](#)
- [Other](#)

Site Type

- [Artifact scatter-low density](#)
- [Features-subsurface](#)
- [Prehistoric midden\(s\)](#)
- [Village \(prehistoric\)](#)
- [Shell midden \(prehistoric\)](#)
- [Burial mound \(prehistoric\)](#)
- [Land-terrestrial](#)
- [Limited activity \(prehistoric\)](#)

Suggested Citation:

Florida Department of State, Division of Historical Resources (FDOS-DHR). "WL00068 from United States / Florida / Walton". (2013) In *Florida Site Files*. Florida Department of State, Division of Historical Resources (FDOS-DHR) (Ed.) . Released: 2013-11-13. Open Context. <<http://opencontext.org/subjects/24714053-8773-4FDC-43F3-A87D49AF9BF2>>

Editorial Status



In preparation, draft-stage

Part of Project

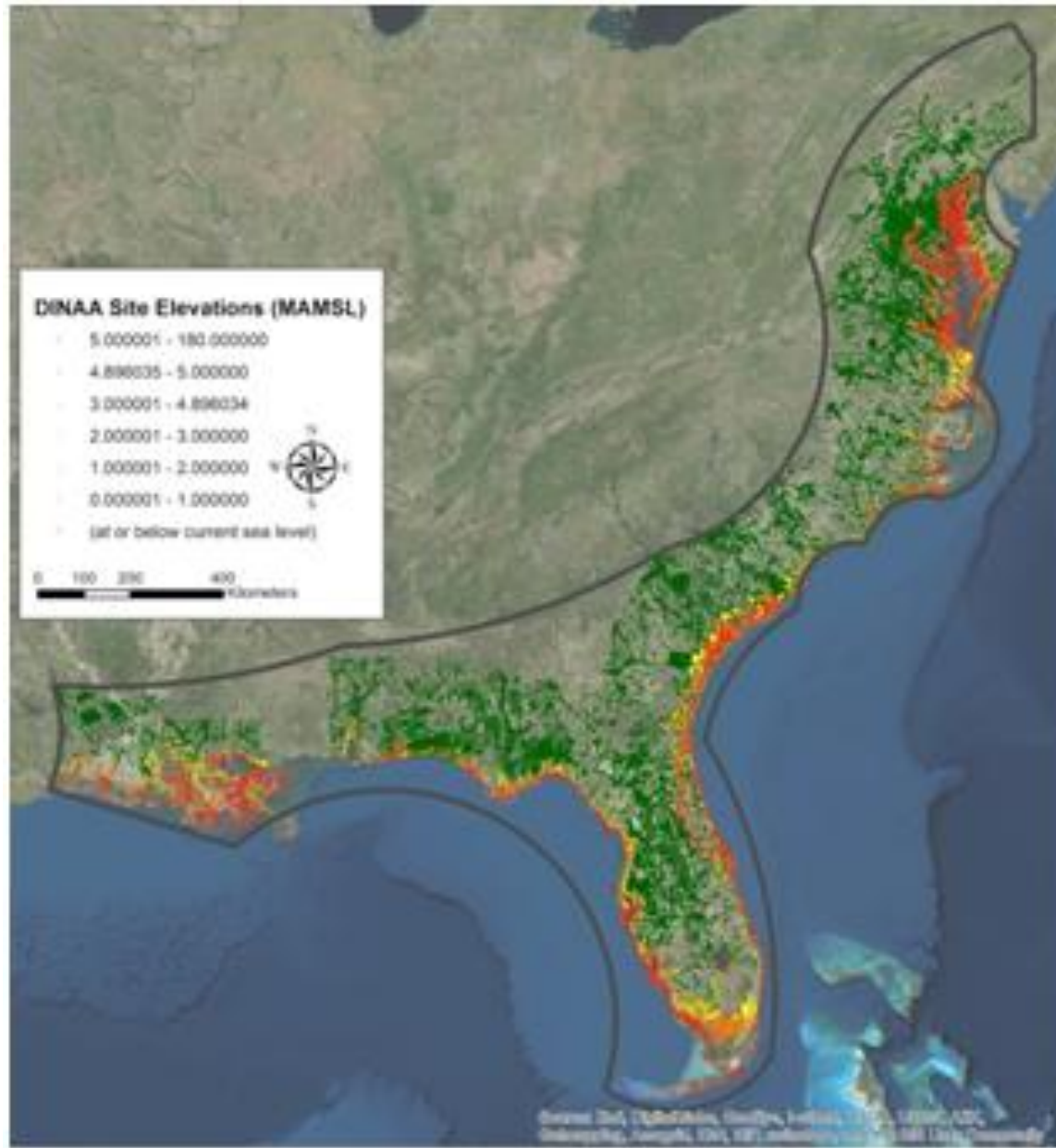
[Florida Site Files](#)

Mapping Data

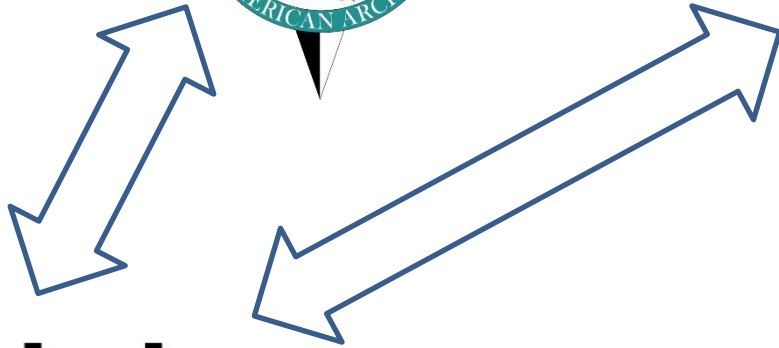




# Now: Large-Scale Assessment



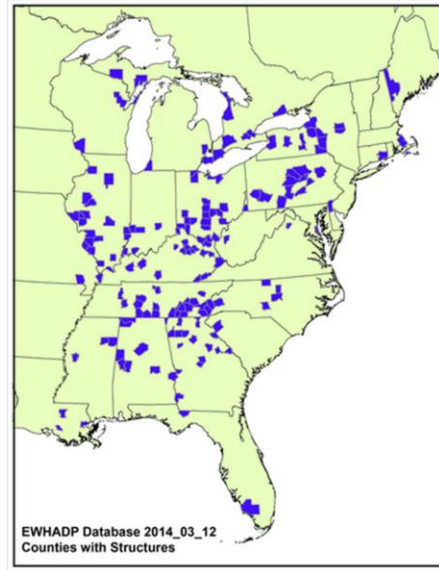
# Now: Grey Literature Connections



## Eastern Woodlands Household Archaeology Data Project

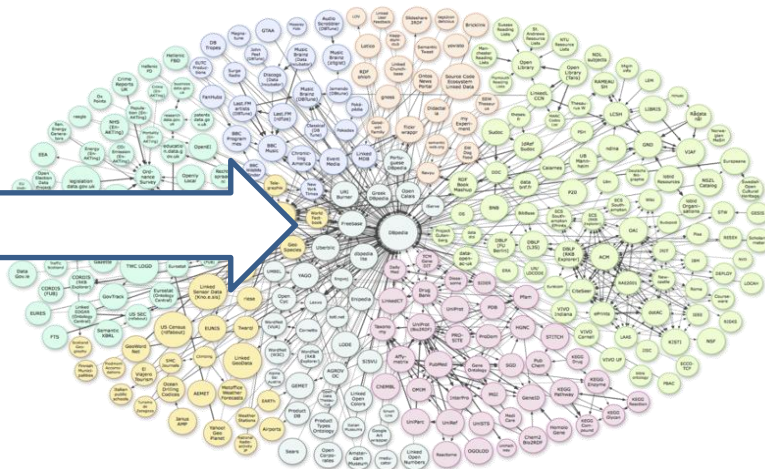
Home About What's New Structures by State/Province Database Bibliography more...

Select a state/province from the list.



- |                      |                     |
|----------------------|---------------------|
| <b>United States</b> | New Hampshire       |
| Alabama              | New Jersey          |
| Arkansas             | New York            |
| Connecticut          | North Carolina      |
| Delaware             | Ohio                |
| Florida              | Pennsylvania        |
| Georgia              | Rhode Island        |
| Illinois             | South Carolina      |
| Indiana              | Tennessee           |
| Iowa                 | Vermont             |
| Kentucky             | Virginia            |
| Louisiana            | West Virginia       |
| Maine                | Wisconsin           |
| Maryland             |                     |
| Massachusetts        | <b>Canada</b>       |
| Michigan             | Ontario             |
| Minnesota            | New Brunswick       |
| Mississippi          | Nova Scotia and PEI |
| Missouri             | Quebec              |

github  
SOCIAL CODING



http://



Google



# Future: Integration w/ Scientific Corpus



WIKIMEDIA COMMONS

File:DeSoto Map Leg 2 HRoe 2008.jpg

From Wikimedia Commons, the free media repository

File history | File usage on Commons | File usage on other wikis

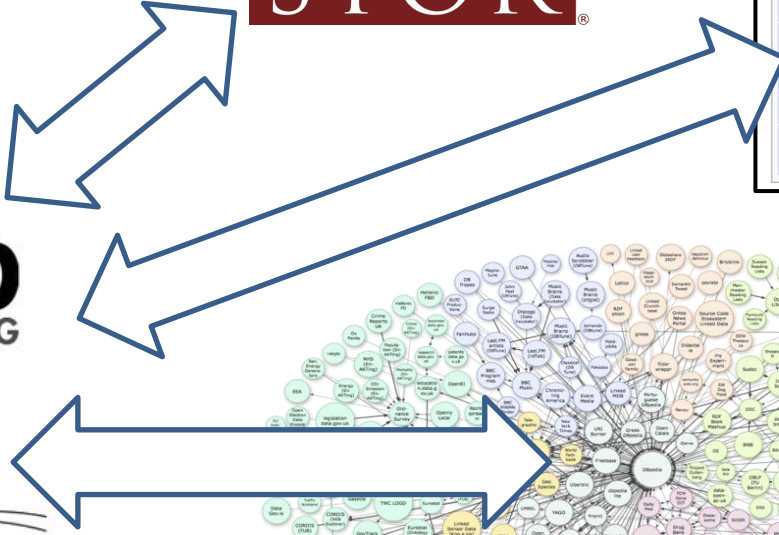
**Description** English: A map showing the de Soto expedition route through the future U.S. states of Georgia, South Carolina, North Carolina, Tennessee, and Alabama. Based on the Charles M. Hudson map of 1997.

**Date** 20 September 2008 (original upload date)  
(Original text : 2008)

**Source** Transferred from en.wikipedia; transferred to Commons by User:Dmitri Lytov using CommonsHelper.  
(Original text : I created this work entirely by myself.)

**Author** Heironymous Rowe (talk) Original uploader was Heironymous Rowe at en.wikipedia

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http://



Google





# More information ...

Kansa EC, Kansa SW and Arbuckle B (2014) Publishing and Pushing: Mixing Models for Communicating Research Data in Archaeology. *International Journal of Digital Curation* 9(1): 57–70. [<http://dx.doi.org/10.2218/ijdc.v9i1.301>]

Arbuckle BS, Kansa SW, Kansa E, Orton D, Çakırlar C, Gourichon L, Atici L, Galik A, Marciniak A, Mulville J, Buitenhuis H, Carruthers D, De Cupere B, Demirergi A, Frame S, Helmer D, Martin L, Peters J, Pöllath N, Pawłowska K, Russell N, Twiss K and Würtenberger D (2014) Data Sharing Reveals Complexity in the Westward Spread of Domestic Animals across Neolithic Turkey. *PLoS ONE* 9(6): e99845. [<http://dx.doi.org/10.1371/journal.pone.0099845>]

Wells JJ, Kansa EC, Kansa SW, Yerka SJ, Anderson DG, Bissett TG, Myers KN and DeMuth RC (2014) Web-Based Discovery and Integration of Archaeological Historic Properties Inventory Data: The Digital Index of North American Archaeology (DINAA). *Literary and Linguistic Computing* 29(3): 349-360. [<http://dx.doi.org/10.1093/lc/fqu028>]