

# THE SOUTHWEST SOCIAL NETWORKS DATABASE

## Late Prehispanic Artifact Distributions in the Western U.S. Southwest

Wm. Randall Haas, Jr.<sup>1</sup>, Jeffery J. Clark<sup>2</sup>, Barbara J. Mills<sup>1</sup>, Lewis Borck<sup>1</sup>, Brett Hill<sup>2,3</sup>, Deborah Huntley<sup>2</sup>, Matthew Peeples<sup>1,2</sup>, Susan C. Ryan<sup>1</sup>, M. Steven Shackley<sup>4</sup>, Meaghan A. Trowbridge<sup>5</sup>

<sup>1</sup>The University of Arizona, <sup>2</sup>Archaeology Southwest, <sup>3</sup>Hendrix College, <sup>4</sup>Geoarchaeological XRF Lab, <sup>5</sup>Statistical Research, Inc.



The Southwest Social Networks (SWSN) Project recently completed a three-year effort to compile ceramic and obsidian data from late prehispanic (A.D. 1200-1550) sites of more than 12 rooms in the western U.S. Southwest. Material data from more than 700 sites derive from exhaustive searches of more than 240 published and unpublished data sources as well as from new field collections in poorly represented regions.

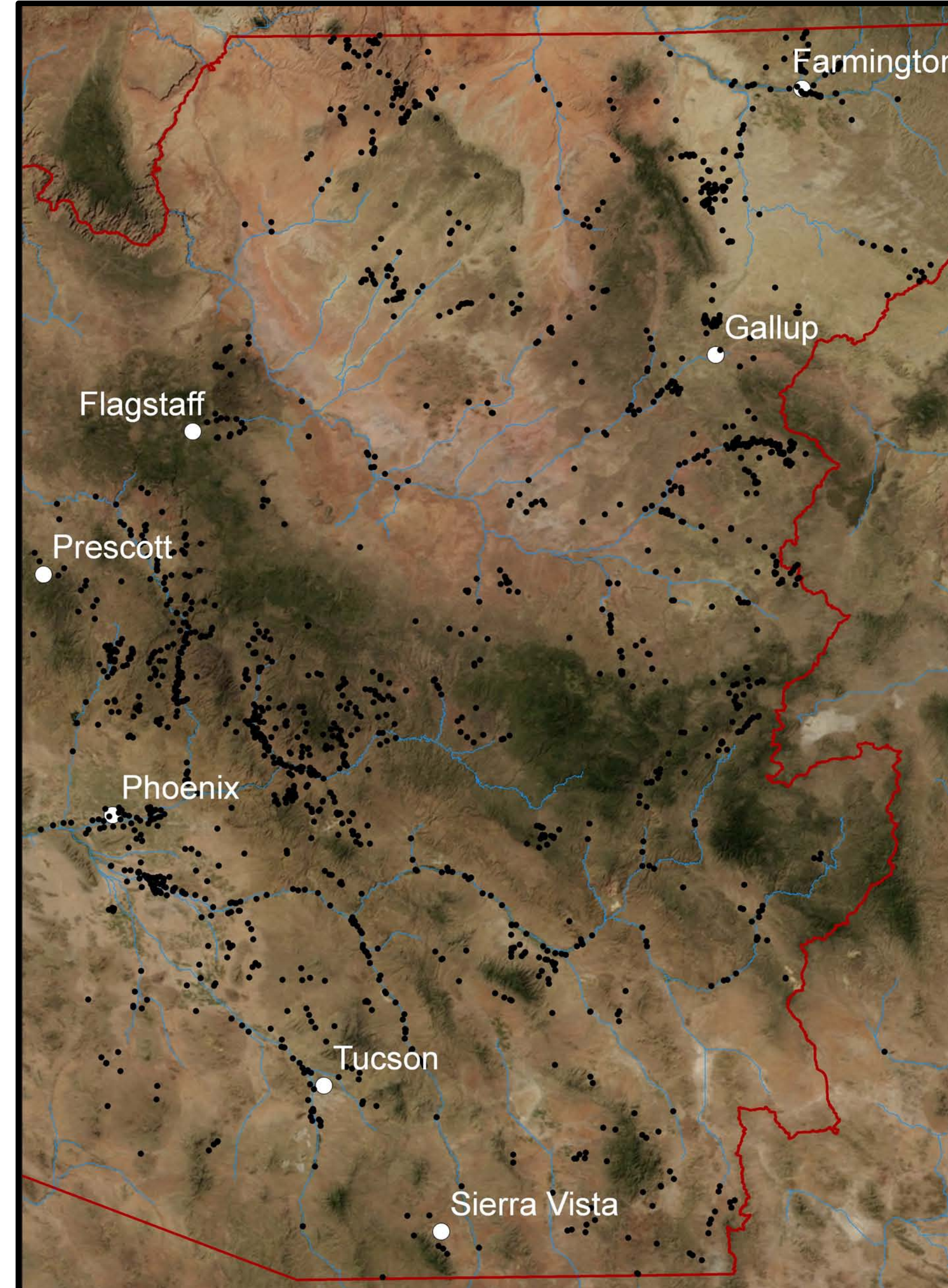
Artifact data in the SWSN database are referenced to site proveniences and standardized artifact-classification systems. The provenience data expand on those compiled in the Coalescent Communities Database (Hill et al. 2004). A unified master ceramic typology incorporates every geographically and temporally defined ceramic type and ware that archaeologists have formally defined. Metadata on collection methods are also integrated to permit data filtering as particular questions warrant.

The SWSN project is currently using the data to reconstruct and analyze prehistoric social networks and to explore how network structure changed over time. However, the database has enormous research potential that extends well beyond the immediate goals of this project. Here we provide a mere glimpse of this potential by presenting macro-regional summary statistics and spatial graphics for several important ceramic wares and sourced obsidian artifacts.

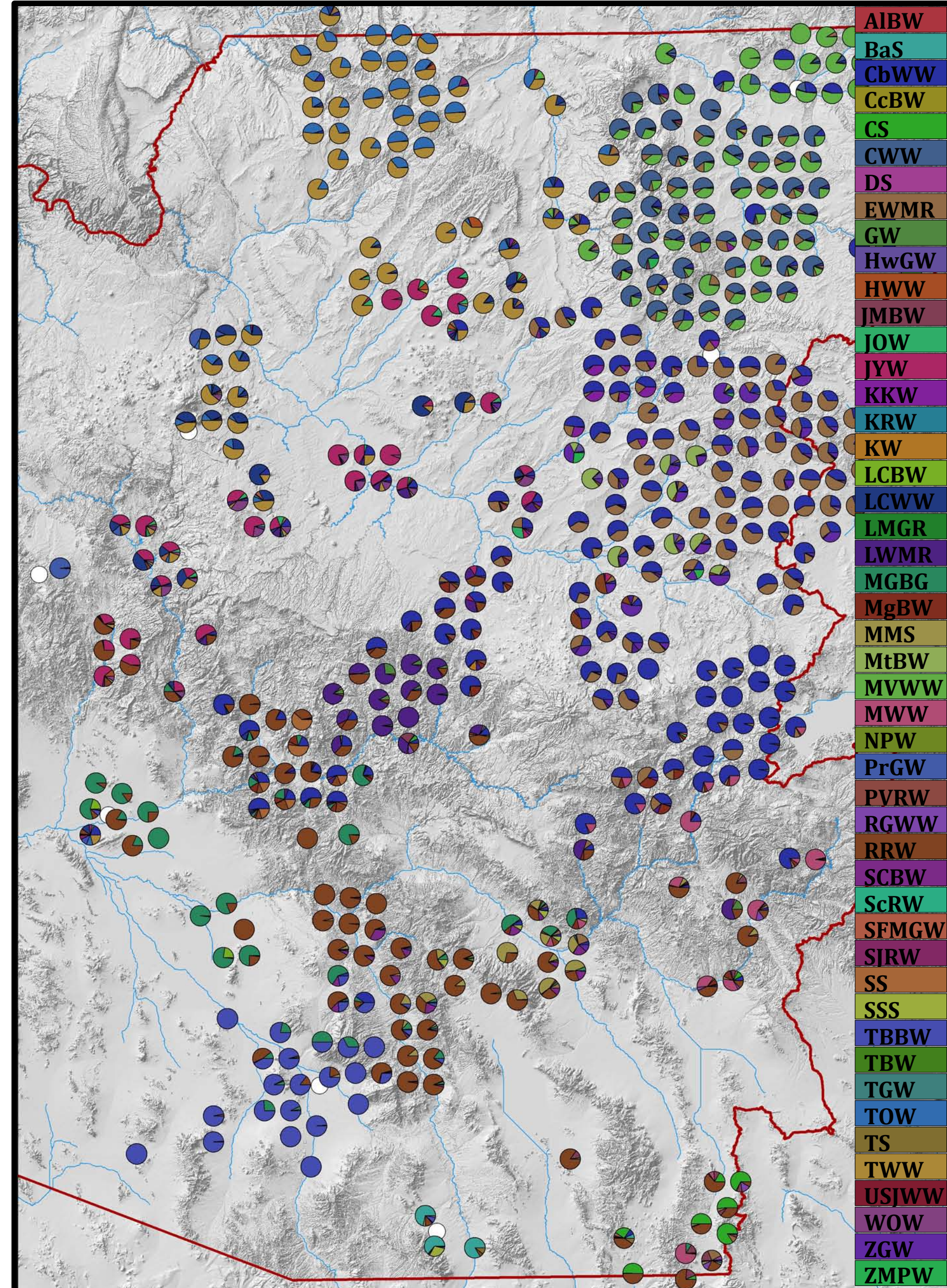
The database continues to expand as we now work to populate it with pre-1200 sites and assemblages east of the Continental Divide. We look forward to continued collaborations with researchers in these areas, and we hope that the database will stimulate additional research among members of the archaeological community.

**References Cited**  
 Environmental Systems Research Inc. 2010 ArcGIS. Redlands.  
 Hill, J. Brett, Jeffery J. Clark, William H. Doelle, and Patrick D. Lyons 2004 Prehistoric Demography in the Southwest: Migration, Coalescence, and Hohokam Population Decline. *American Antiquity* 69, no. 4: 689-716.  
 Roberts, John M. Jr., Barbara J. Mills, Jeffery J. Clark, Wm. Randall Haas Jr., Deborah L. Huntley, and Meaghan A. Trowbridge. In Press A Method for Chronological Apportioning of Ceramic Assemblages. *Journal of Archaeological Science*.

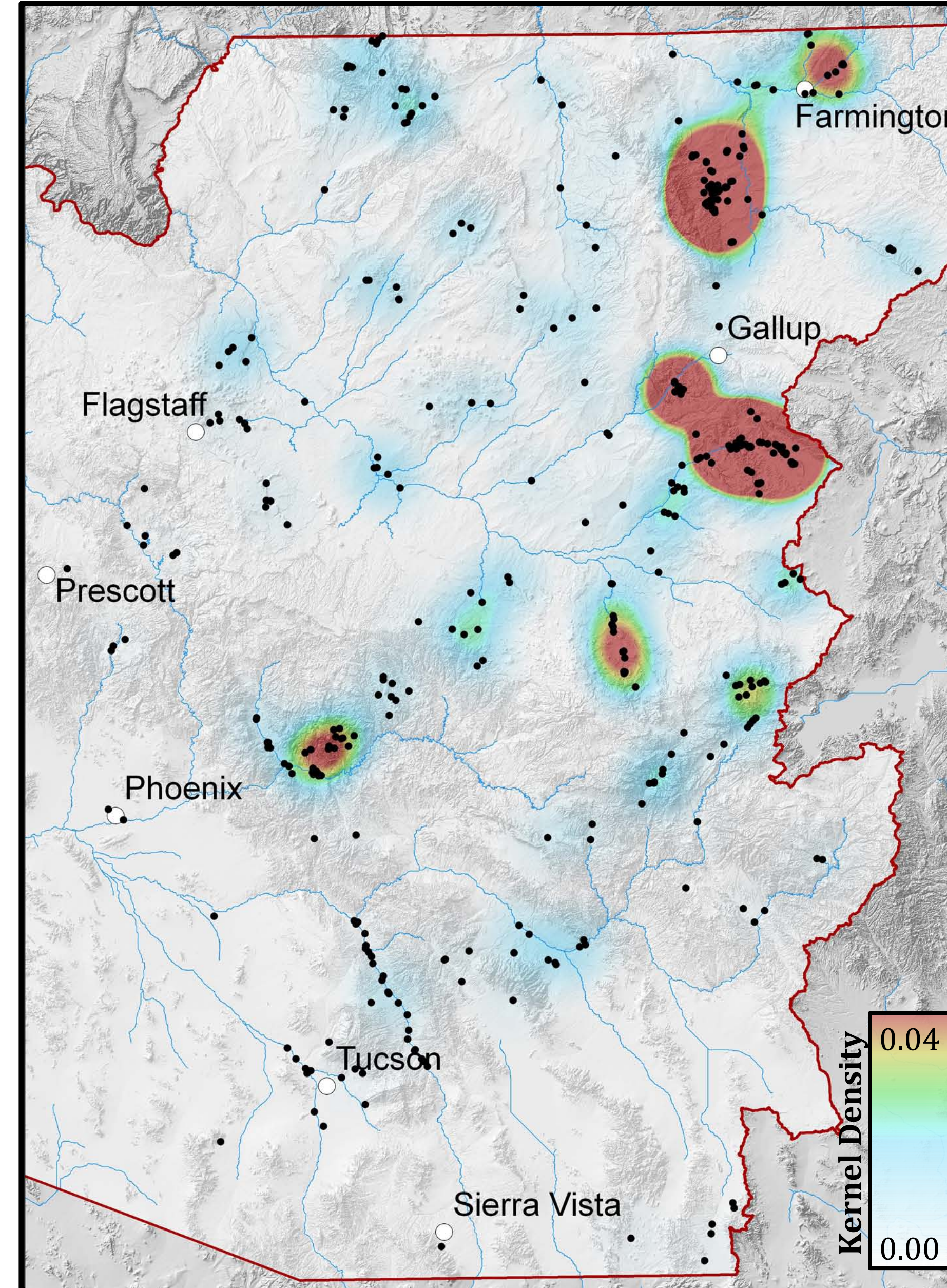
Sites A.D. 1200-1550



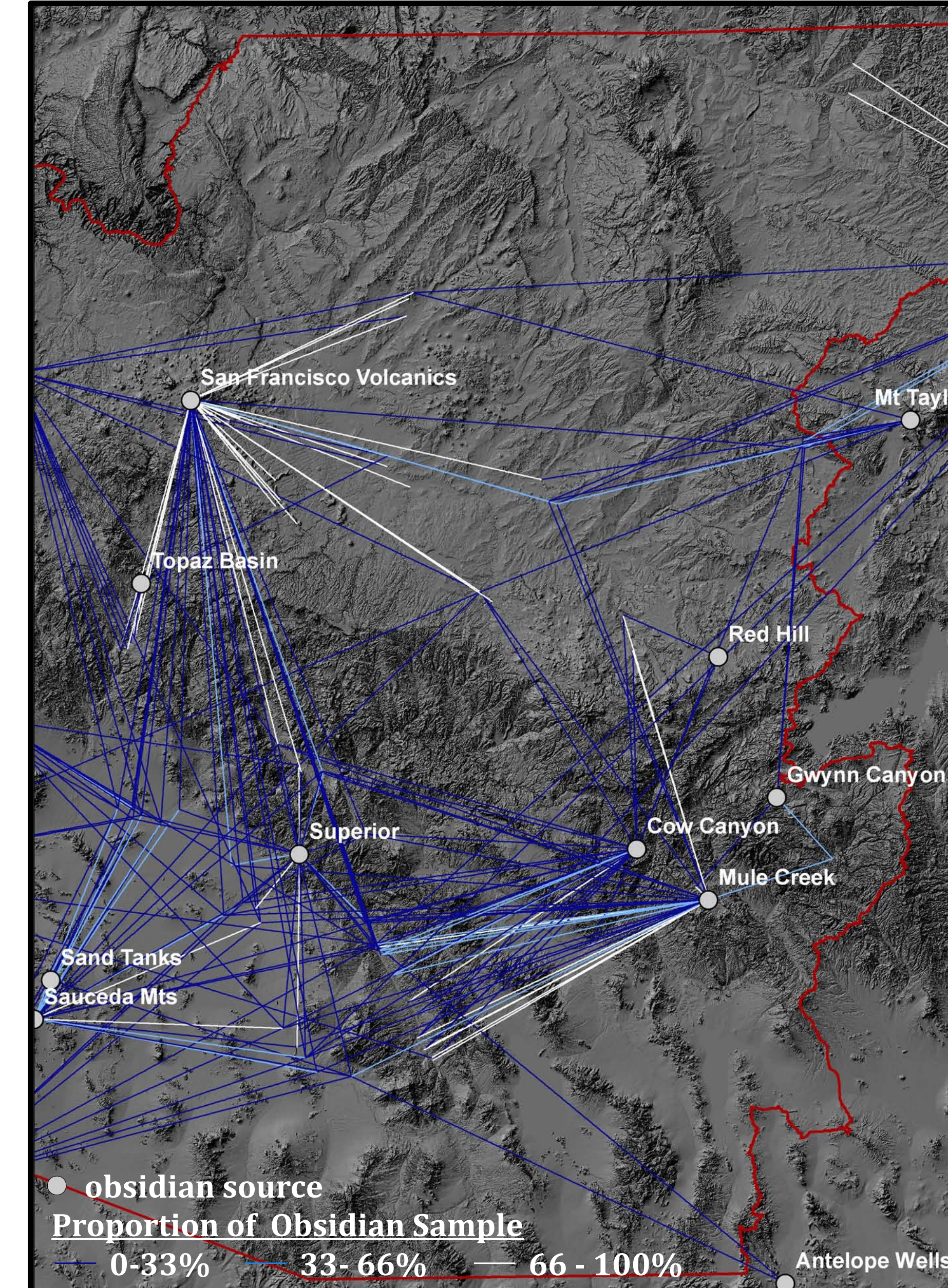
Decorated Ceramic Wares A.D. 1200-1550



Corrugated : Plain Ware A.D. 1200-1550



Obsidian Site-to-Source Ties A.D. 1200-1550



**Legend**

- site ≥13 rooms
  - modern city
  - SWSN study area
  - ~ major drainage
- 200 km

Datum: NAD 1927  
 Projection: UTM Zone 12N  
 Base Maps: NASA Blue Marble and USGS National Elevation data  
 Note: Kernel density values express the number of sites, weighted by a given proportion (e.g., Cibola White Ware: all decorated wares), within a 30-km radius of each 1.6 x 1.6-km cell in the study area (ESRI 2010). Ceramic maps only include sites with 30 or more ceramics and the obsidian map only includes sites with 10 or more sourced obsidian artifacts.

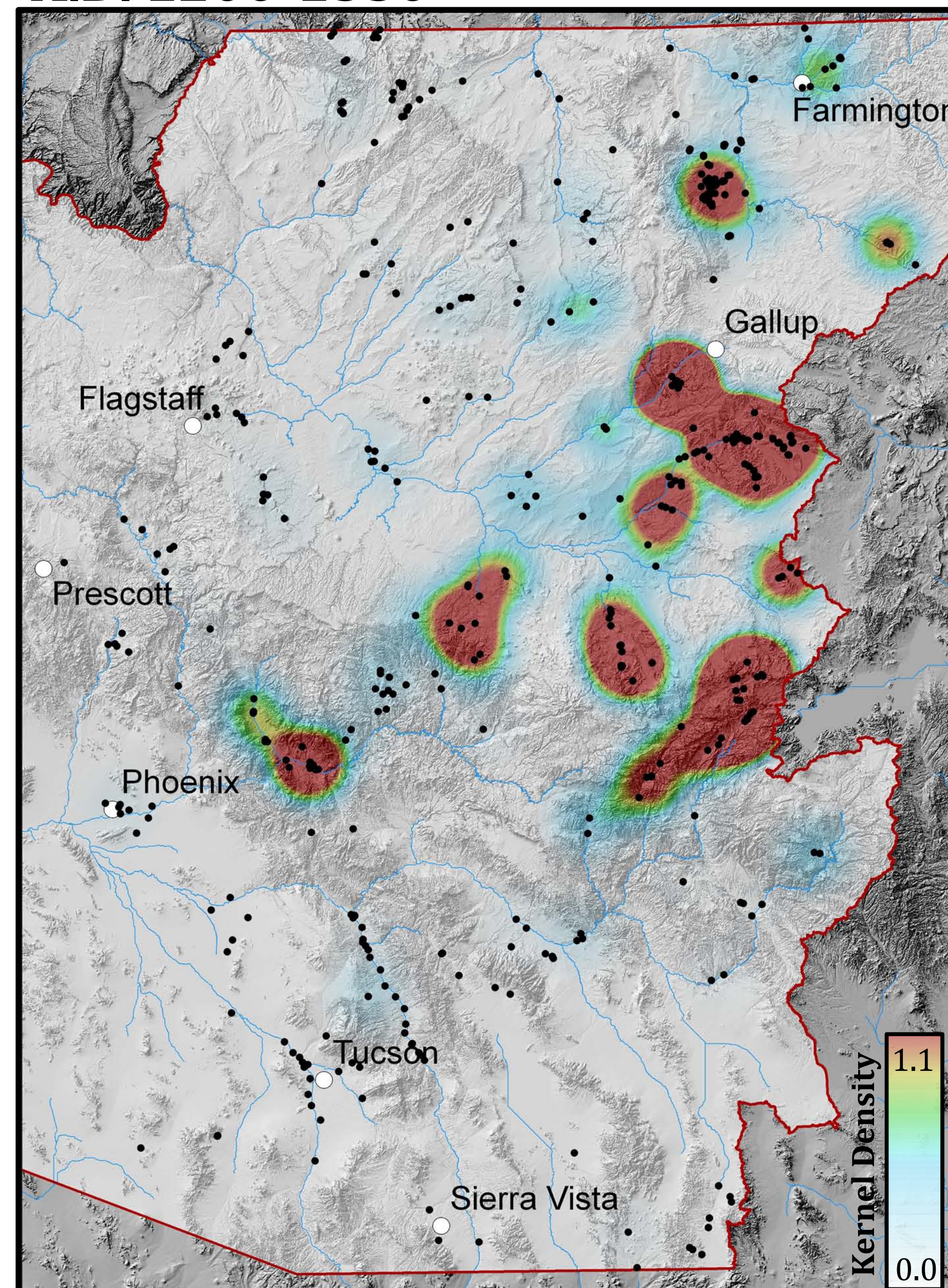
**SWSN Data Summary**

- Site Data**
- Sites: 2,856
  - Rooms: 147,354
  - Sites with ceramic samples: 709
  - Sites with sourced obsidian samples: 138
  - Sites with public architecture data: 620

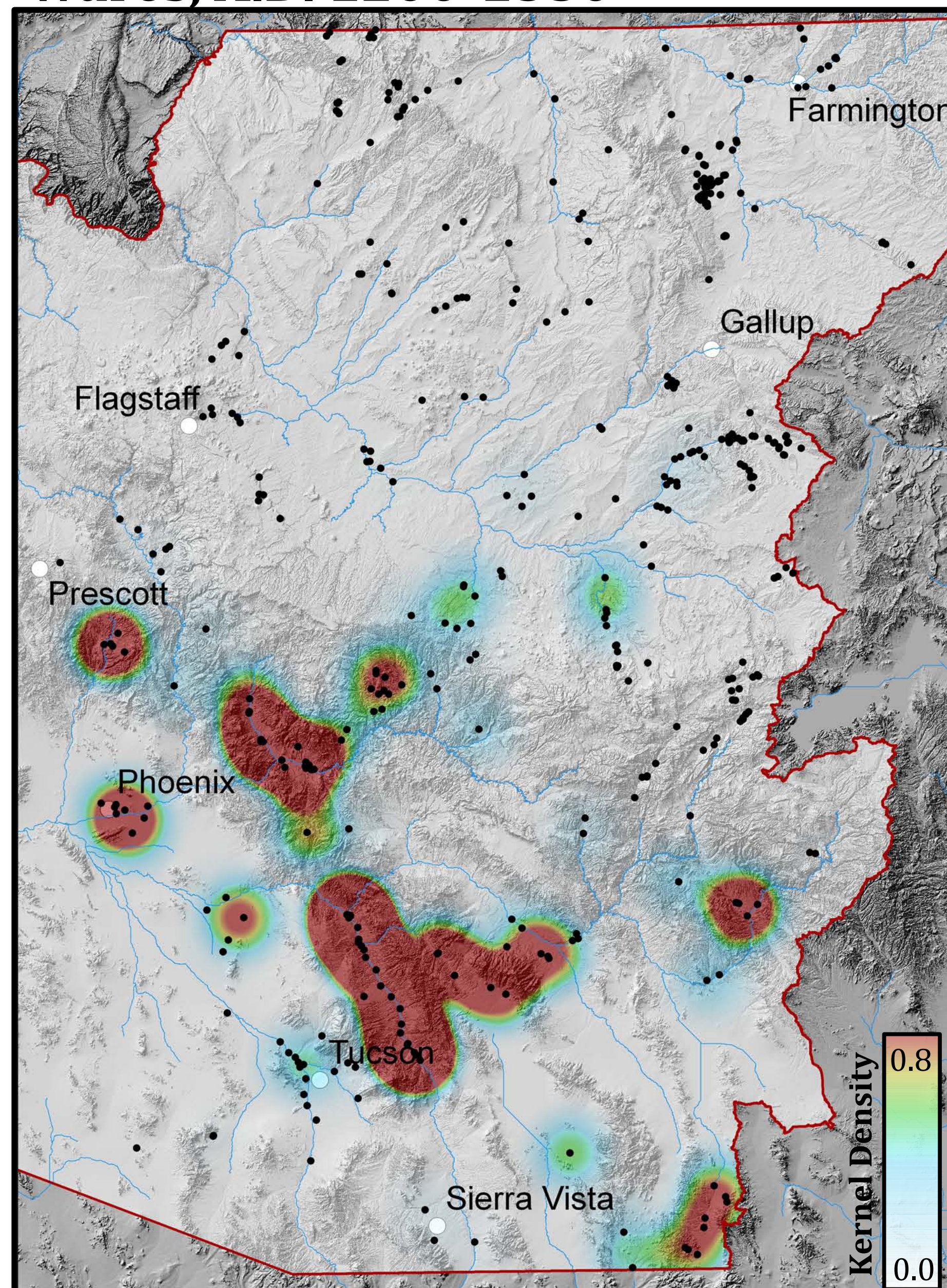
- Ceramic Data**
- Total ceramics: 4.3 million
  - Decorated ceramics: 848,877
  - Plain ceramics: 3.3 million
  - Corrugated ceramics: 529,711
  - Ceramic Types: 627
  - Ceramic Wares: 104

- Obsidian Data**
- Sourced artifacts: 5,007
  - Sources: 34

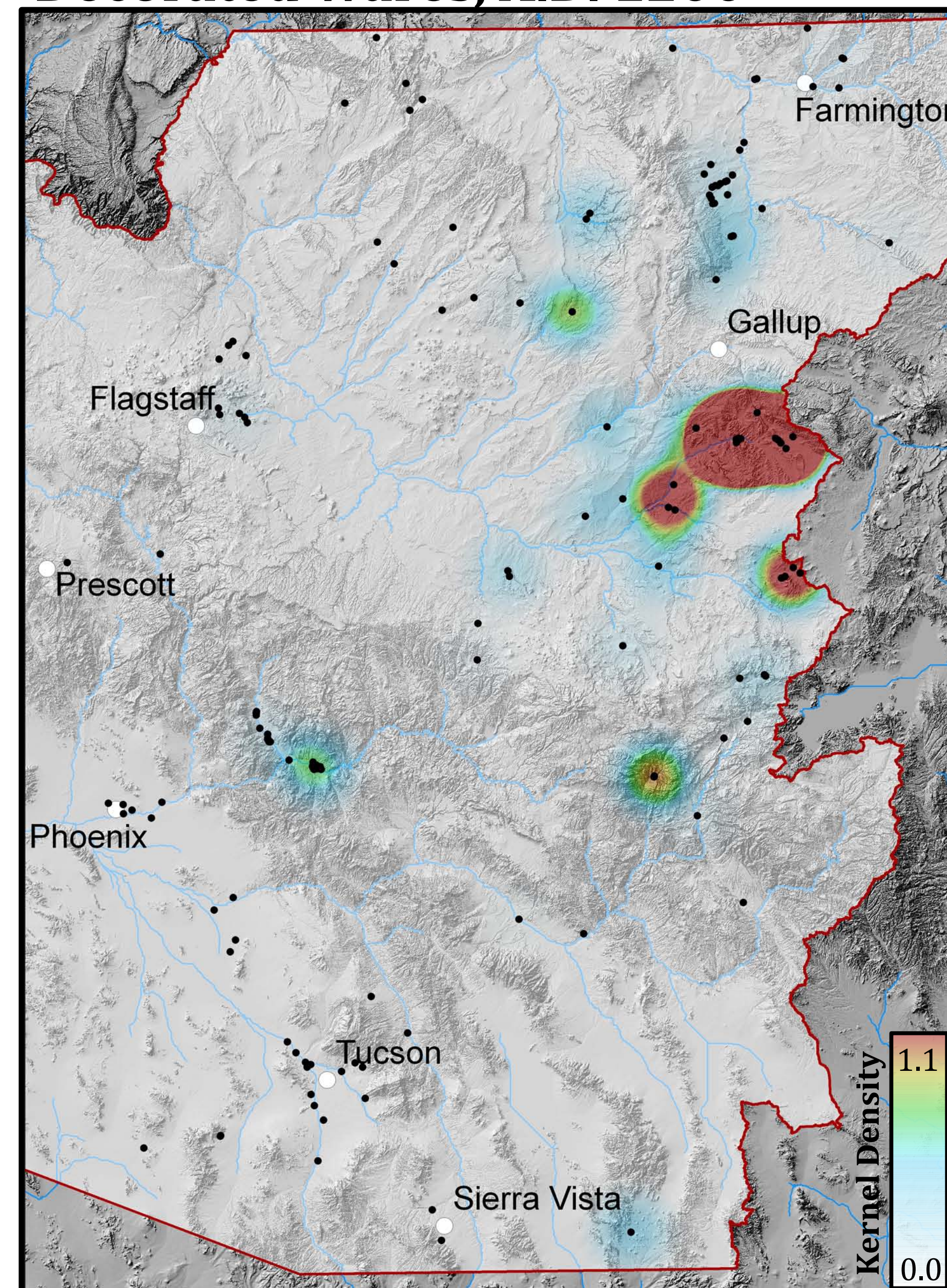
Cibola White : All Decorated Wares A.D. 1200-1550



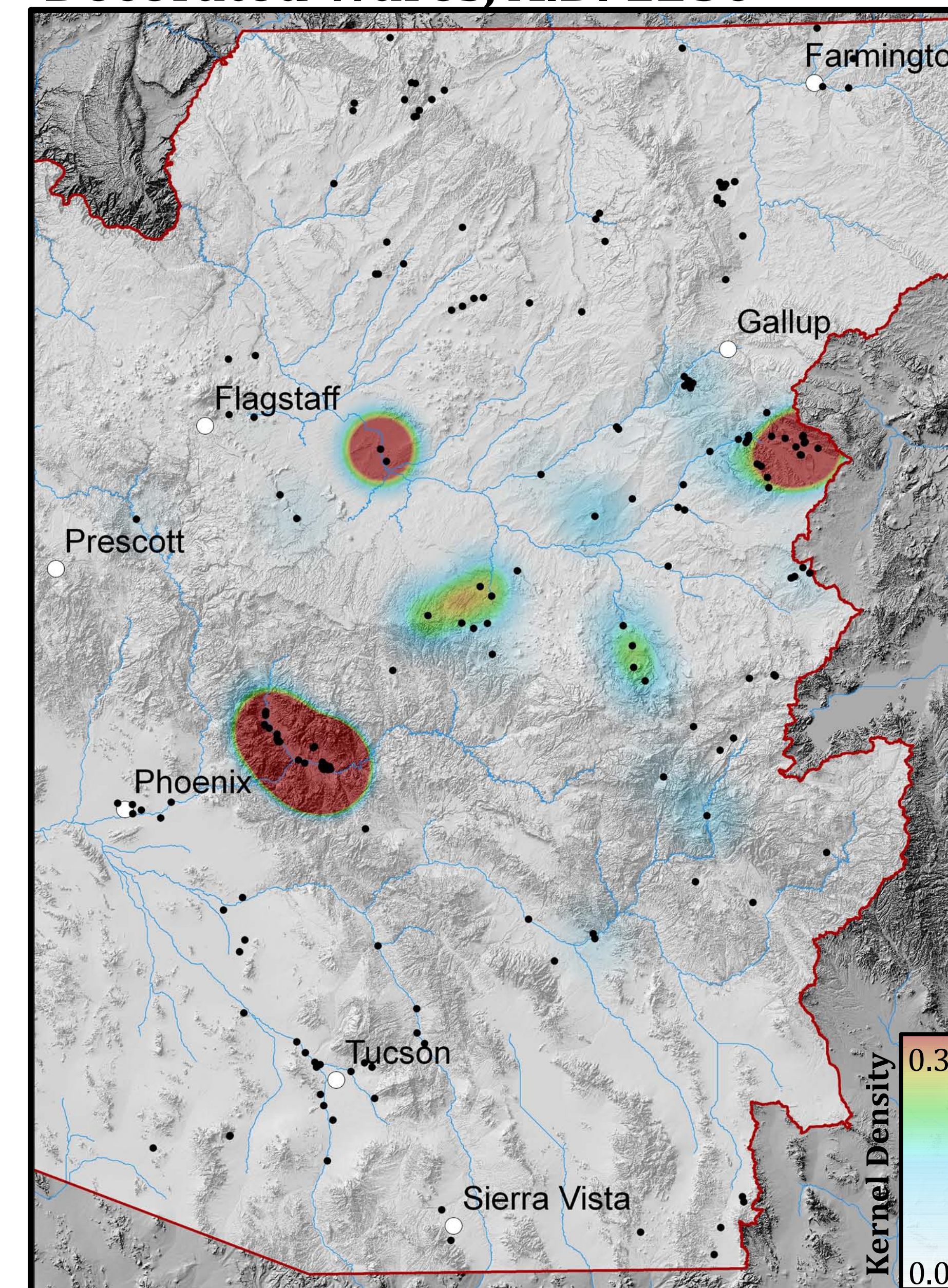
Salado Polychrome : All Decorated Wares, A.D. 1200-1550



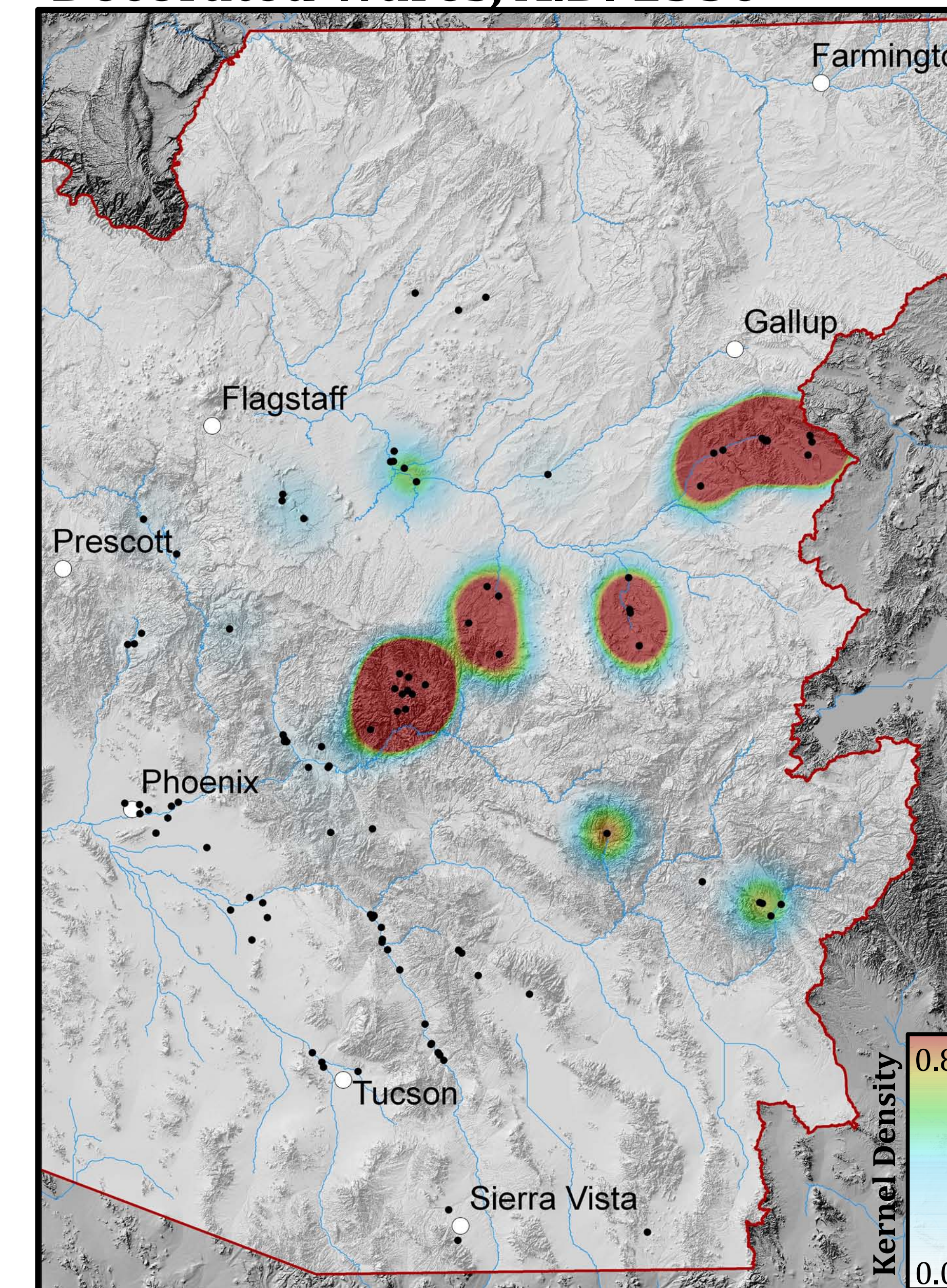
White Mountain Red : All Decorated Wares, A.D. 1200



White Mountain Red : All Decorated Wares, A.D. 1250



White Mountain Red : All Decorated Wares, A.D. 1350



Note: Ceramic counts for this time period derived using the method described in Roberts et al. (In Press).

Note: Ceramic counts for this time period derived using the method described in Roberts et al. (In Press).

Note: Ceramic counts for this time period derived using the method described in Roberts et al. (In Press).