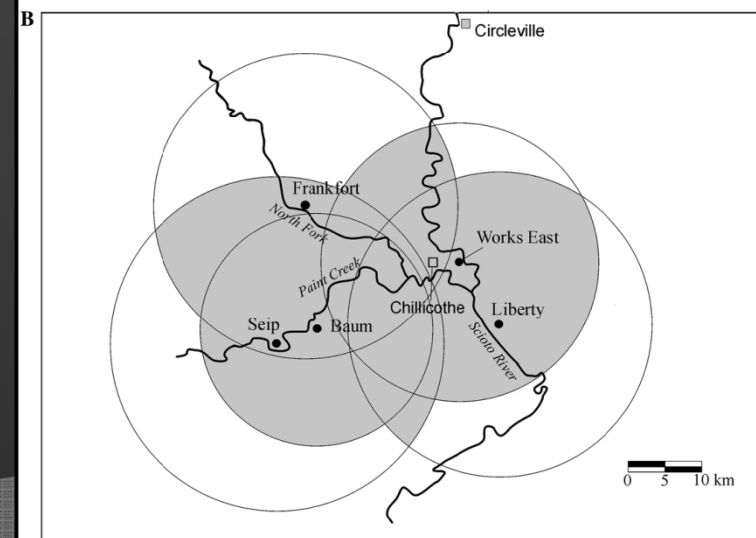
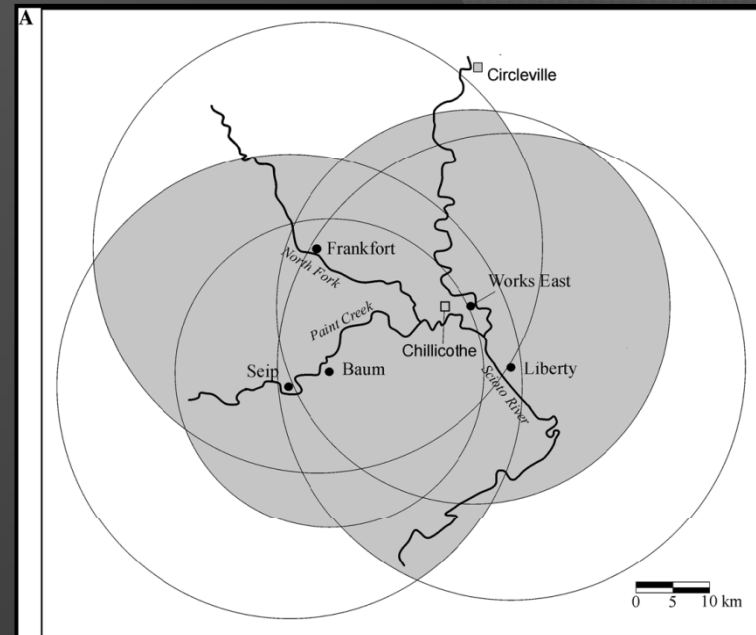
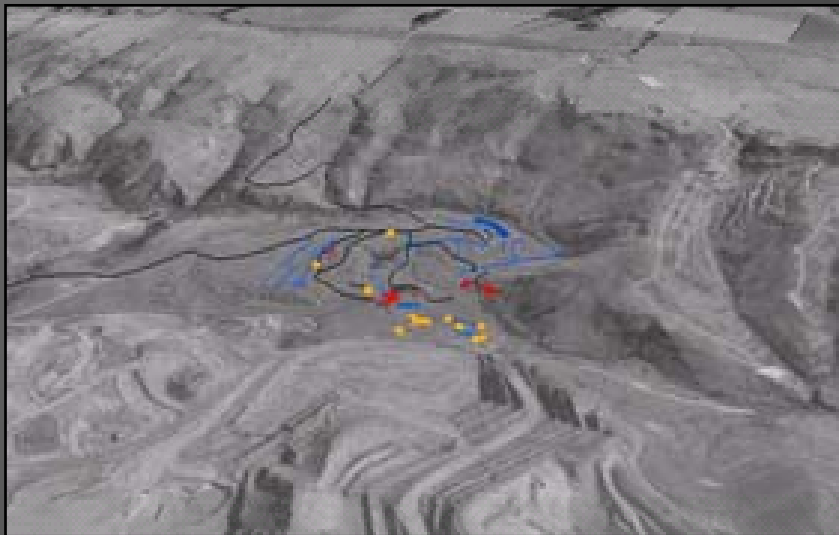


# Interpreting Space and Place: An Introduction to Archaeological GIS

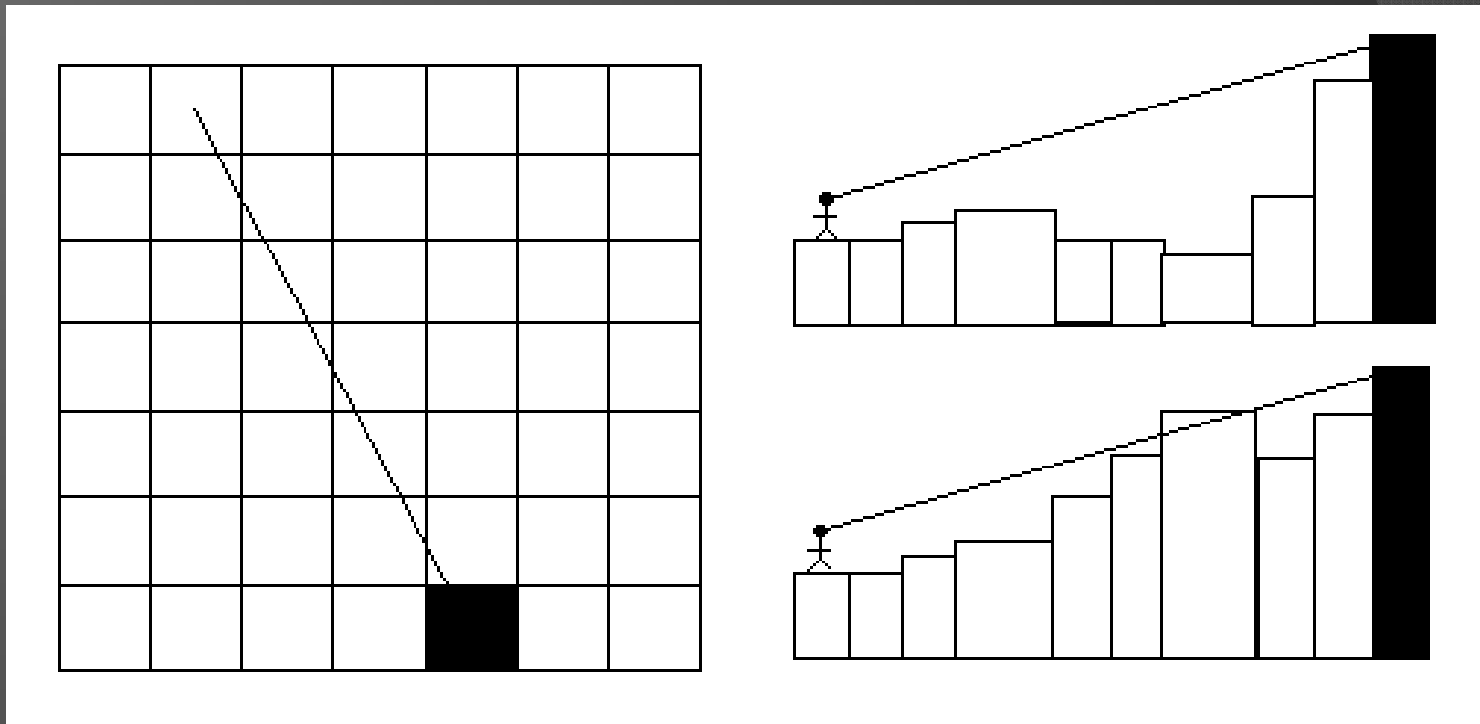
## Lecture 17

### Viewshed Analysis



# Interpreting Space and Place: An Introduction to Archaeological GIS

Modeling terrain to answer questions - viewshed analysis

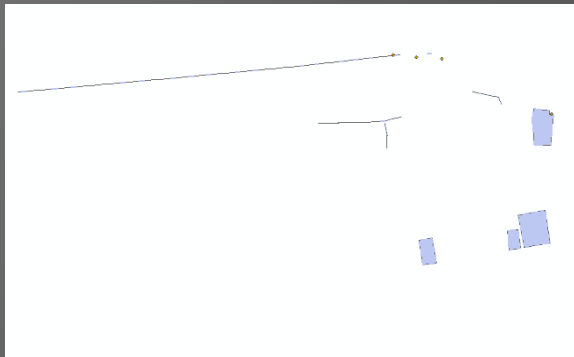


(Source: David Wheatley)

# Interpreting Space and Place: An Introduction to Archaeological GIS

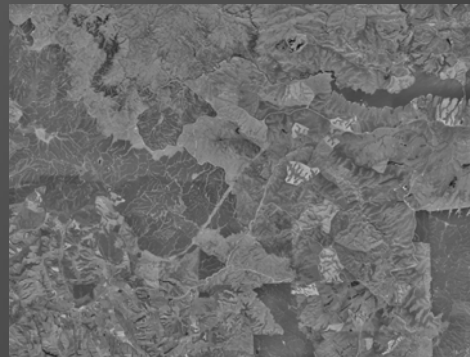
Modeling (landscape or predictive)

Steps include:



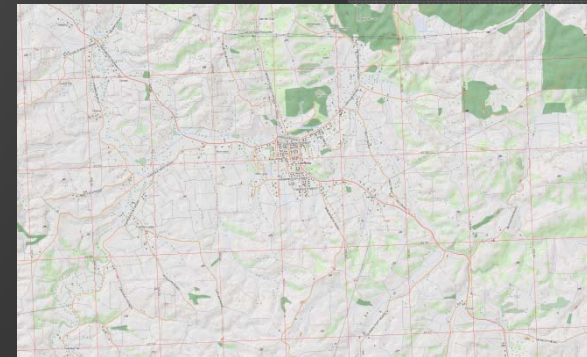
Raw GPS Data

+

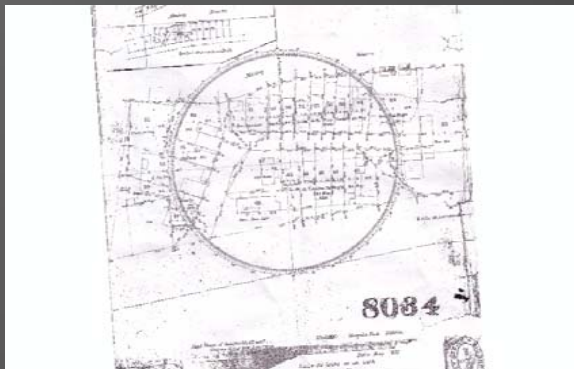


Aerial Photos

+

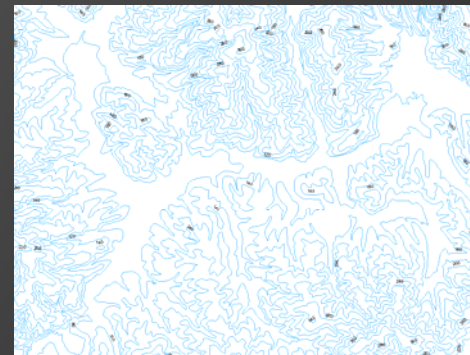


Georeferenced Topo Maps



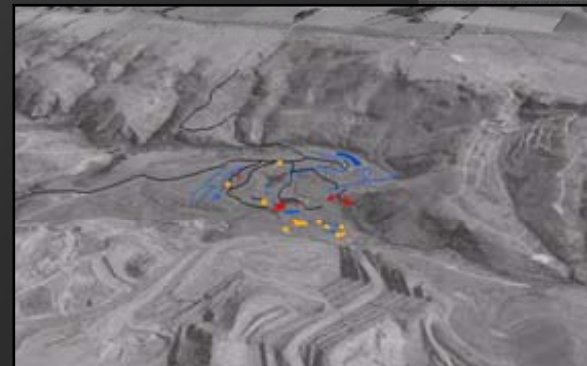
Historic Surveys

+



Contour Data to build DTM

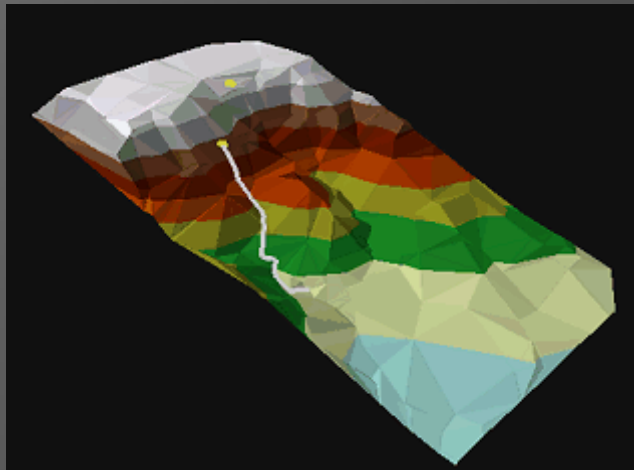
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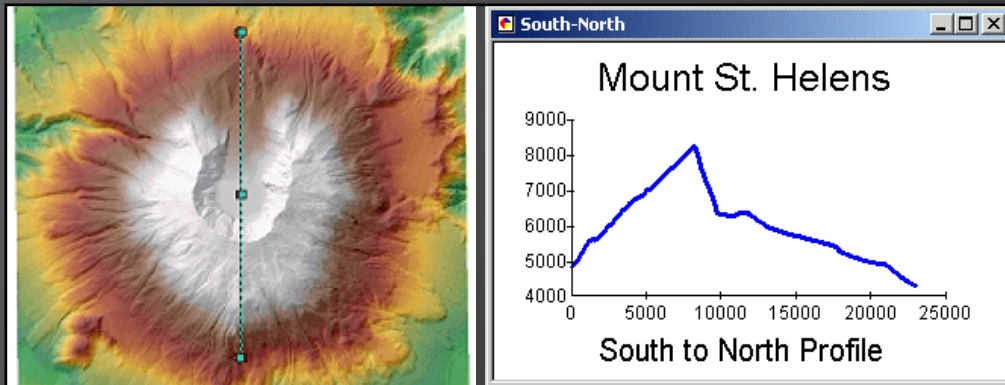
3D Model of Site

# Anthropological GIS (ANT 4930)

Using this knowledge to answer Anthropological Concerns  
Terrain Analysis (in addition to Viewsheds)



Steepest Path



Profile Line Steepness

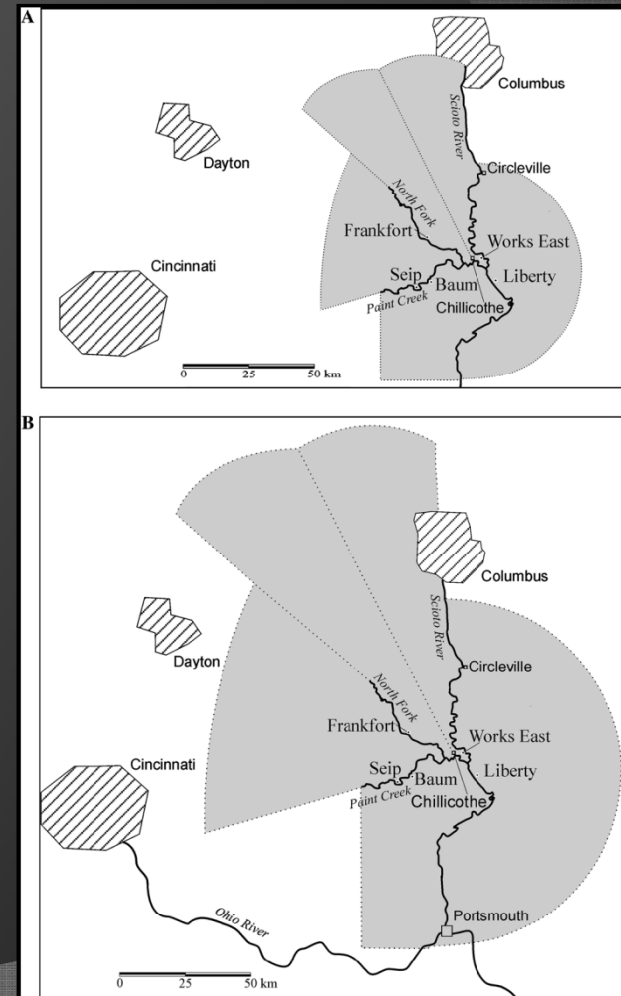
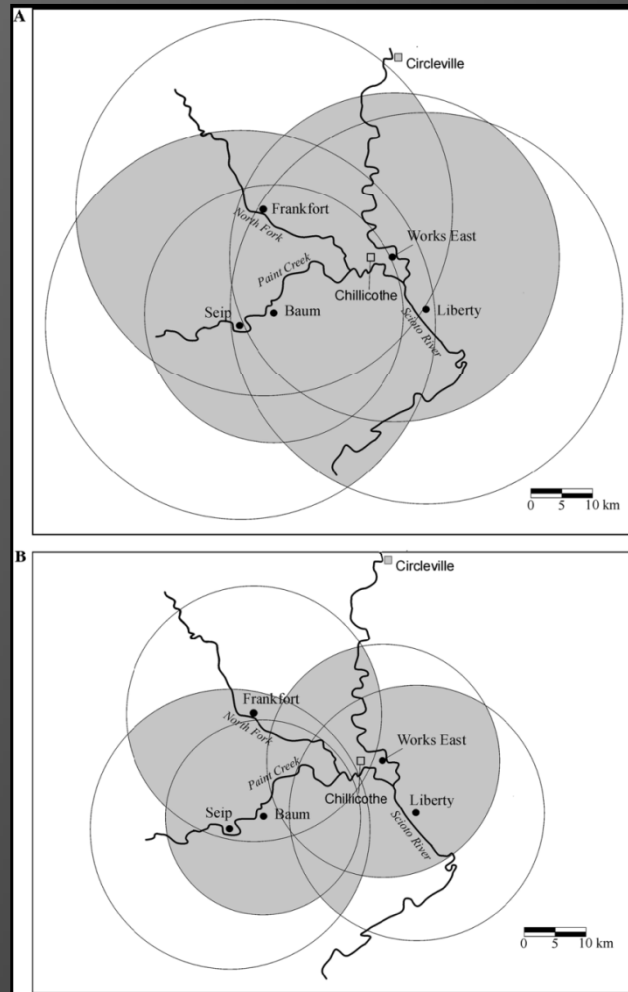


Calculate Area and Volume

# Interpreting Space and Place: An Introduction to Archaeological GIS

## Lecture 17

Bernardini – is the Earth's surface equal to Euclidian space?



# Interpreting Space and Place: An Introduction to Archaeological GIS

## Examples of Use

Modeling terrain to answer questions - viewshed analysis

Long Mounds of Salisbury plains in England

### Background

- Among the earliest earthworks in Britain
- Individual viewshed maps for each mound created
- Used to determine if locations were random
- Prove or refute unsubstantiated observations?

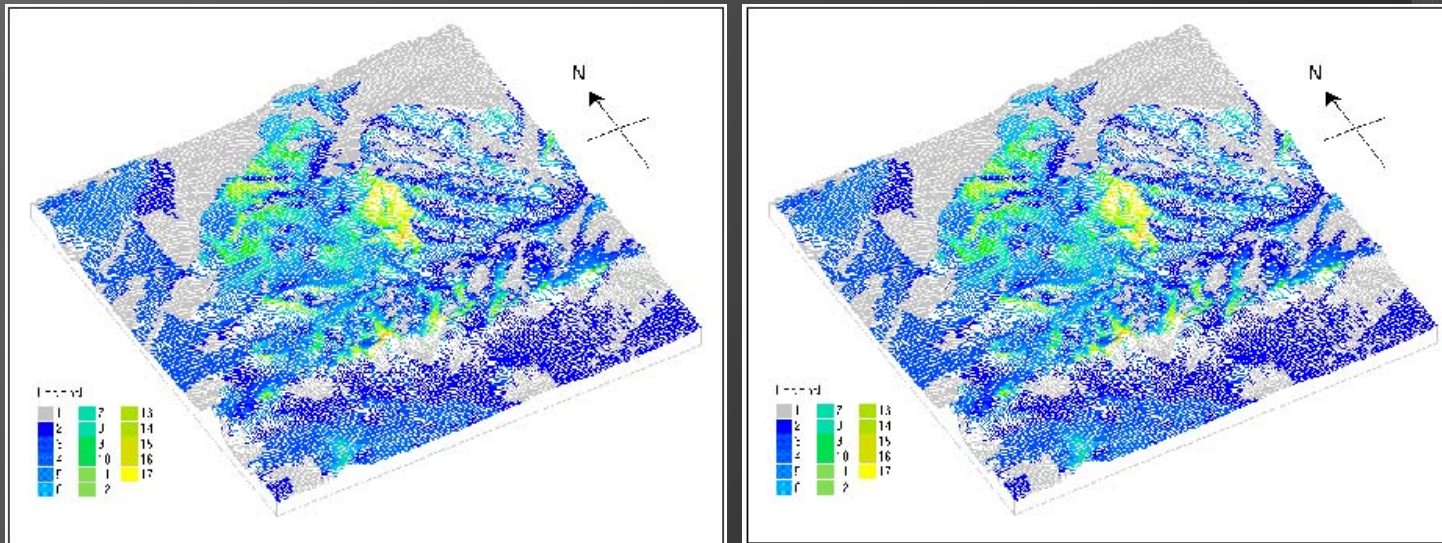
(Source: David Wheatley)

# Interpreting Space and Place: An Introduction to Archaeological GIS

## Examples of Use

Modeling terrain to answer questions - viewshed analysis

Long Mounds of Salisbury plains in England



(Source: David Wheatley)