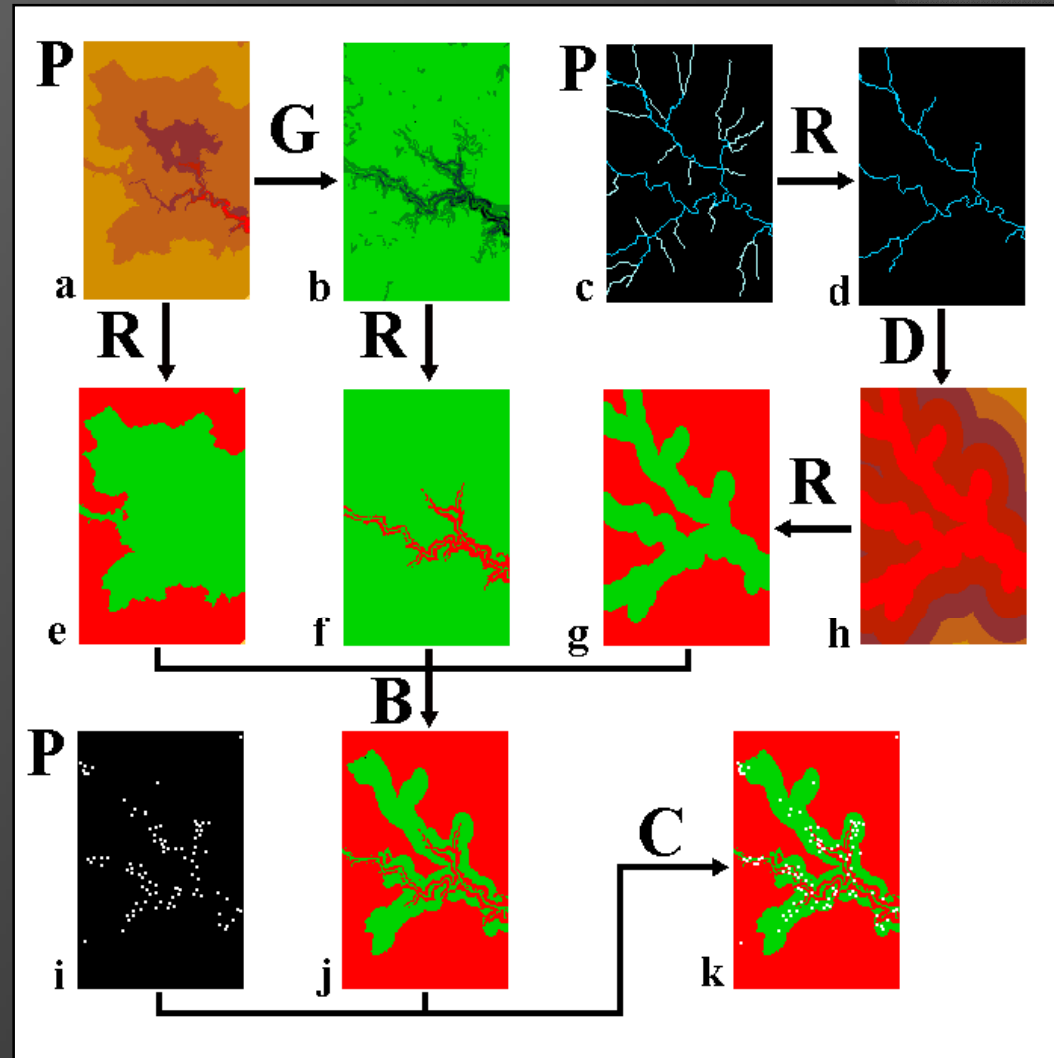


Interpreting Space and Place: An Introduction to Archaeological GIS

Lecture 19

Predictive Modeling



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Lecture 19

Predictive Modeling - Kvamme 2006

-If you read only one reading this week, this is that reading!!!-

Setting the Stage – The Pen and Pencil Experiment (remember this!)

Main Point – Differences in how Hard and Soft Sciences ‘think’

About two-thirds of the anthropologists asserted contrasts or *differences* in their responses, with statements like “one is green, the other white,” “one has a metal tip, the other a graphite one,” “one cross-section is octagonal, the other is circular,” and so on. In the more science-based group, nearly the opposite occurred, with almost three-quarters seeing *commonalities* like “both are roughly cylindrical,” “both have about the same mass,” or “both have a conical tip.”

Your experiments show a similar divergence between groups

Why this is important...

it highlights how – from the very beginning – archaeological GIS has had to deal with a type of identity crises

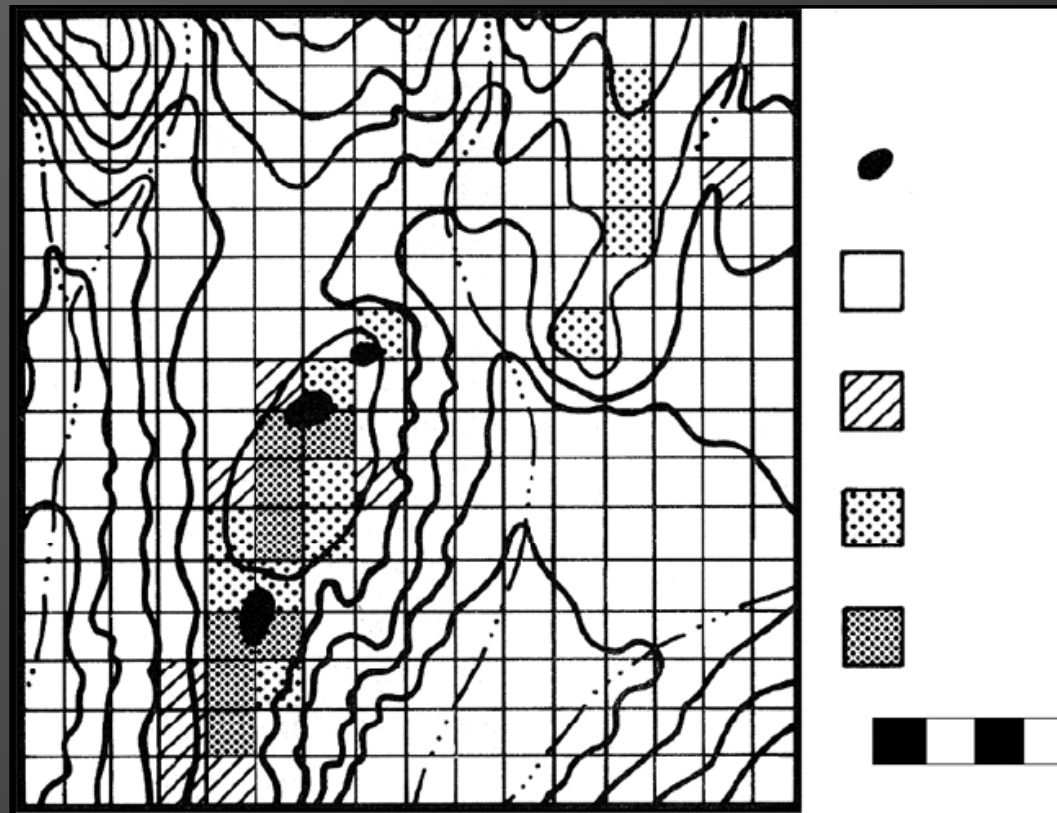
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Lecture 19

Predictive Modeling - Kvamme 2006

The First Age of Modelling

The Glenwood Project



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Lecture 19

Predictive Modeling - Kvamme 2006

The Second Age of Modelling

Micro-computer advances refine the ability to accurately predict likely site locations

More attention paid to the fact that paleoenvironments different

Discussions of sampling strategies increase

Increasingly complex theoretical perspectives

Ability to use statistics to test models mathematically

HINT: Don't get hung up on the statistical discussions!

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Examples of Use

Modeling terrain to answer questions - predictive modeling

Bush River area of Maryland

Background

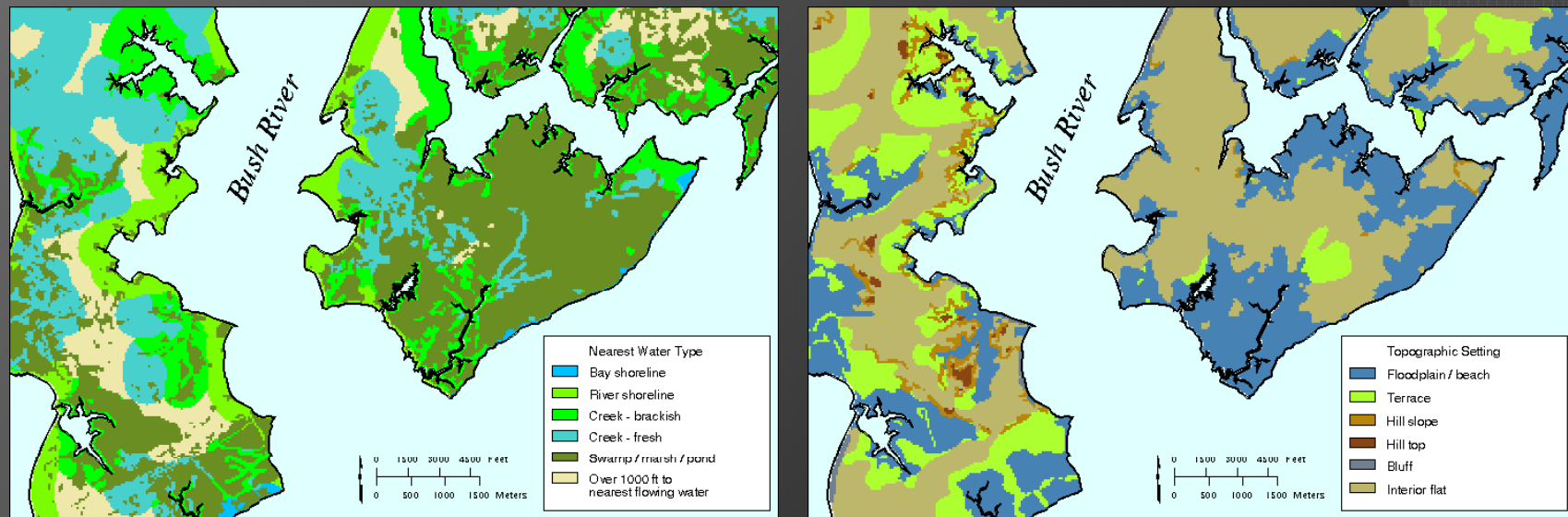
- 572 sites in study area
- Site data modeled with environmental data
- Predicted areas likely to contain shell midden sites

(Source: James A. Kuiper jkuiper@anl.gov: Biogeographer / GIS Analyst
Konnie L. Wescott wescott@anl.gov: Archaeologist)

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Examples of Use

Modeling terrain to answer questions - predictive modeling

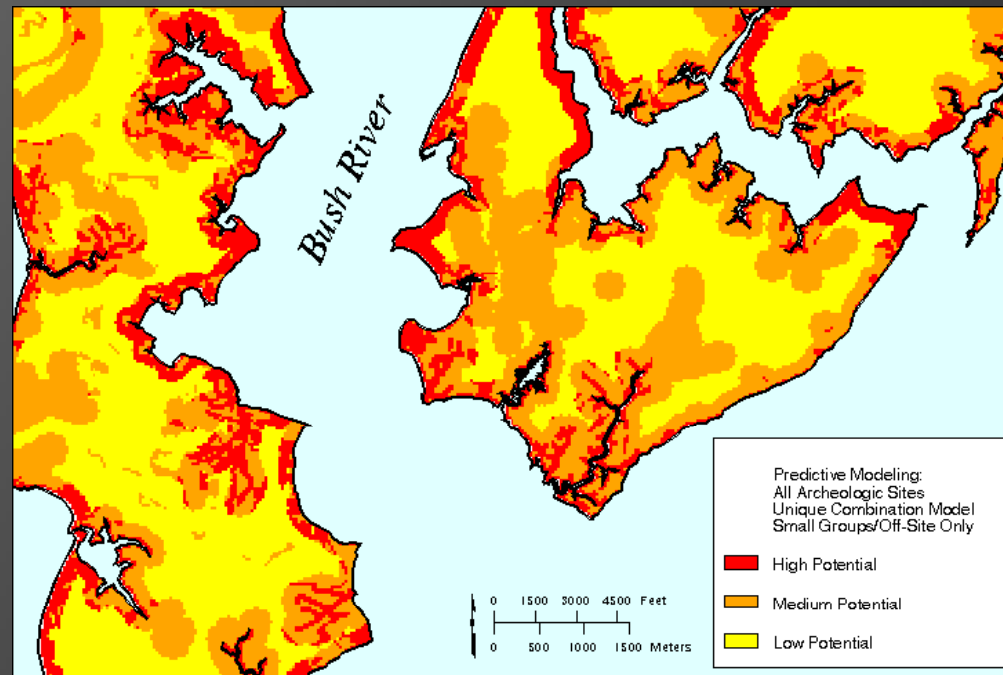


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Interpreting Space and Place: An Introduction to Archaeological GIS

This is the last week you have a new practical GIS lab

You will have the next two weeks to catch up with the practical assignments

There will be no class on Thursday 9 October

Final Exam review on Monday 6 October

Final Essay due on 3 October (no late papers accepted!!!)

This is the last four weeks of the semester, then you're free!