

The Winter GIS Institute

Introductions and Logistics.

Institute Partners

- Library
- EarthLab
- Sociology
- Biostatistics
- Population Studies
- S4

Institute Instructors

- Tom Stieve, Social Science Data Librarian, Rockefeller Library
- Leah Roach, PhD Candidate, Planetary Geology
- John Logan, Sociology, Brown
- Crystal Linkletter, Biostatistics
- Jason Jindrich, S4
- Seth Spielman, S4

Institute Students

- Archaeology
- Community Health
- Economics
- Environmental Studies
- Sociology
- Political Science
- And more...

S4 Fellows

- Community Health
- Spatial Structures in the Social Sciences
- Political Science
- Sociology
- Computer Science
- Economics
- History
- Environmental Studies
- Anthropology

We want you to...

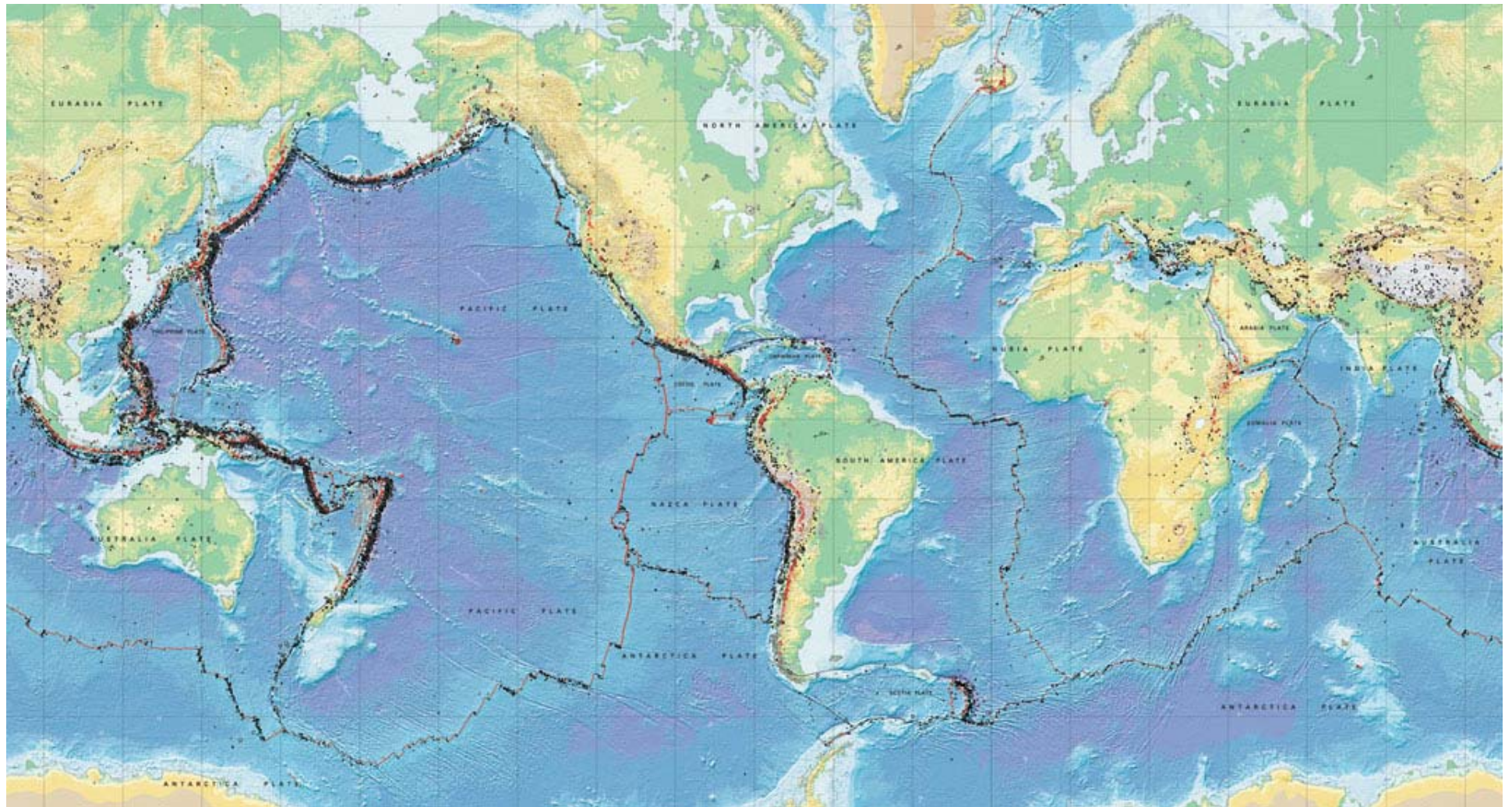
- Do good projects
 - Advance your dissertation and/or research agenda
- See the potential of the spatial approach
 - Learn how to ask questions spatially.

We teach you...

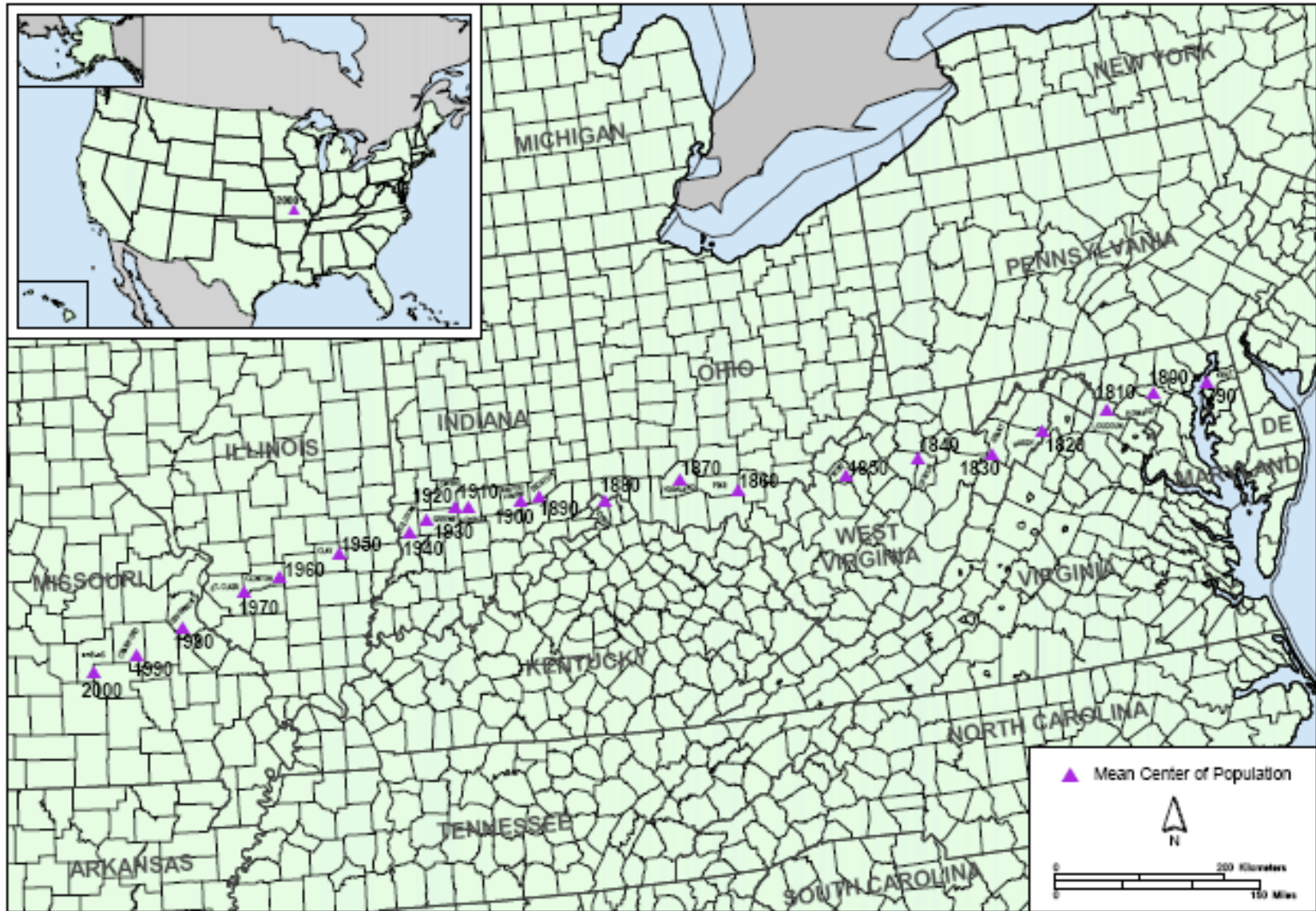
- How to turn plain old data into spatial data
- To explore spatial data visually (ArcGIS and GeoDA)
- To do spatial analysis (ArcGIS, GeoDA, Crimestat)
- To make maps (ArcGIS)

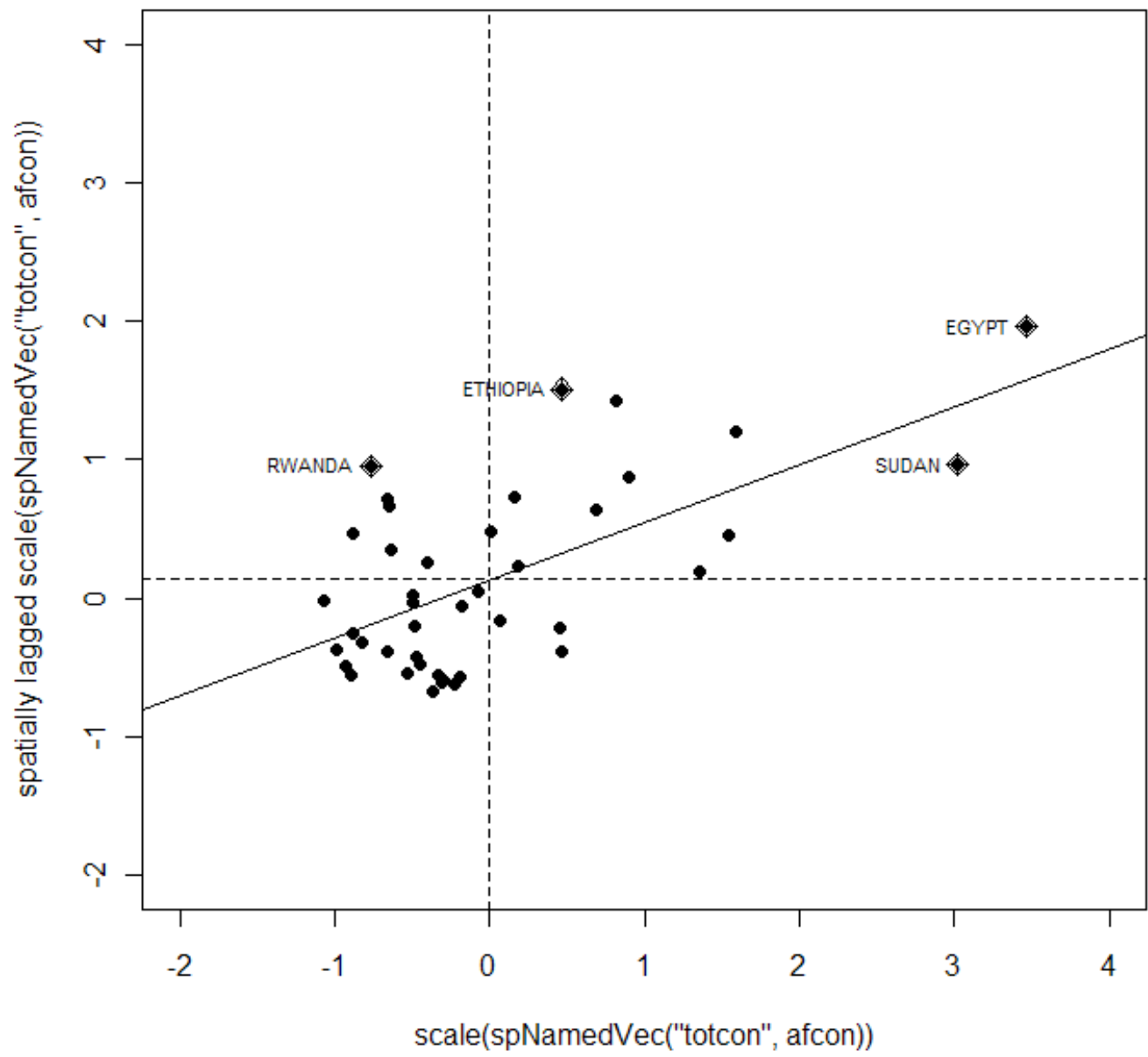
Spatial Relevance vs. Spatial Analysis

- Some questions don't require spatial tools.
 - Which states have the highest infant mortality?
- Others do (space is relevant)
 - What does the landscape of infant mortality look like?
- Others involve hypotheses (analysis)
 - Are states with high infant mortality clustered together?



Mean Center of Population for the United States: 1790 to 2000





Tools for Spatial Analysis

- Spatial approaches to regression (Thursday)
- Geostatistics (not covered)
- Pattern Analysis/Detection (Friday)

Spatial approaches vs. analysis of place

- Maps describing a place are a good starting point for using GIS.
- We'd like your projects to be towards the analysis end of the spectrum. This doesn't mean using statistics but it means asking questions that you couldn't ask without a GIS.

The Institute

- Contribute to the success of your research
- GIS exists to supplement your research, it should not determine your research

Presentations

- While we have high expectations for you presentations we don't have the same expectations for each of you
- Grouped by theme
 - Topic
 - Technique
 - Place
 - Other

The Institute

- Skills based
- Workshops and Exercises will focus on developing GIS and related software skills
- Lectures and seminars will focus on providing background, context, and critical thinking opportunities

Agenda

- Week 1 focus is on training
- Week 2 focus is critical thinking and project work
- Overall focus is building a foundation in the practice and theory of spatial information as well as the tools for collecting, managing, analyzing, and representing spatial data

NEXT...

- Break
- Define GIS – It'll take a long time but we'll end by noon.
- Walk over to CIT 265 then break for lunch.