




**Geographically
Contextualized Modeling
of Human and Natural
Systems in Time and
Space**



**2007 UCGIS Summer
Assembly
Research Workshop**

Participants

- Dave Bennett
- Douglas Flewelling
- Michael Hodgson
- John Keyantash
- Mary Lou Larson
- Scott Mackay
- Carolyn Merry
- Steve Prager
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Some Questions

1. **How does decision making “modify” the environment created by the dynamic interaction of natural-natural and socio-natural systems?**
2. **How is change detected?**
3. **Can properly defined models predict remote sensing, gradients, other processes?**
4. **How to model gradients of change derived from point data.**



Need to

1. Couple complex dynamic natural and cultural systems
2. Represent geo-temporal change in those systems
3. Model how complex natural-natural/socio-natural systems intertwine to create what is seen as the geographic landscape
4. Embed geographic models and use geographic understanding in these models





Workshop Topics for the Creation of Geographically Aware Models

- **Representational Ontology & a common language across time-space models**
- **Identification of unifying models of the geography of systems (socio-natural/natural-natural)**
- **Visualization of specialized GIS models**
- **Agent Based modeling**
- **Process modeling of geographically explicit understanding of hazards, risks, uncertainty, and resilience**
- **Representing geographic phenomena not data**



Nexts

- Identify funding sources
- Identify possible workshop participants
- Develop and present pre-proposal for presentation to funding sources