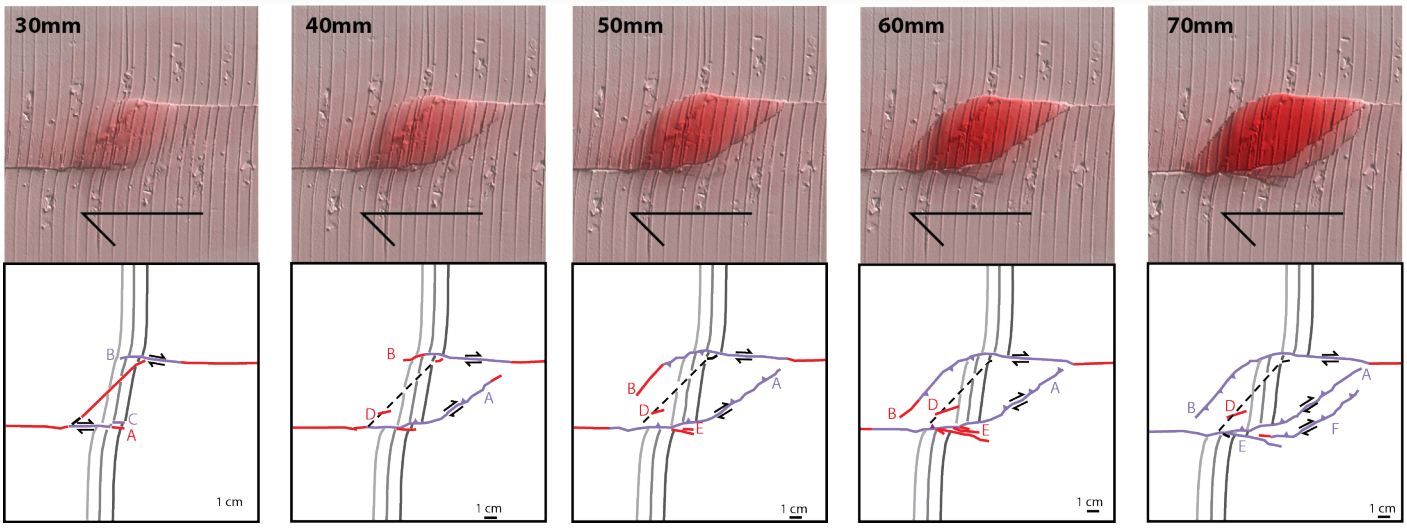
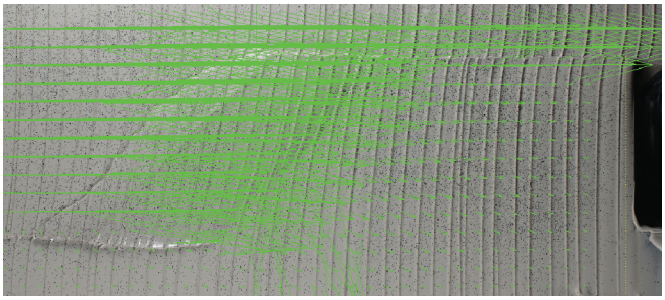
Analog Modeling Workshop June 12, 2012

Structural Geology and Tectonics Forum



Fault evolution around a restraining bend in wet kaolin with 60% w.c. by weight. The laser scanned surfaces reveal the evolving topography of the clay surface.



Particle Integrated Velicometry is an easy to implement system that permits tracking of indvidual particles through the experiment. Here is a PIV for one step in the restraining bend experiment.

The workshop will be held at UMass-Amherst, which is nearby the Williams College base for the forum. About half of the day will be spent running analog experiments in the UMass Physical Modeling Laboratory and collecting data, the other half will be presentations of analog modeling techniques, approaches and results of participants.

The topics that we are likely to visit during the day include:

- Scaling relationships
- Choosing the right rheology
- How to get started with Particle Integrated Velocimetry
- Simple vs complex -- toy models versus simulations of crustal phenomena
- Examples of incorporating analog experiments into the classroom
- Examples of incorporating experimental data analysis into the classroom

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