

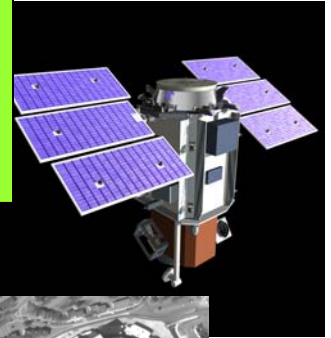
## CE 603 Photogrammetry II

Spring 2006

Instructor: Jim Bethel

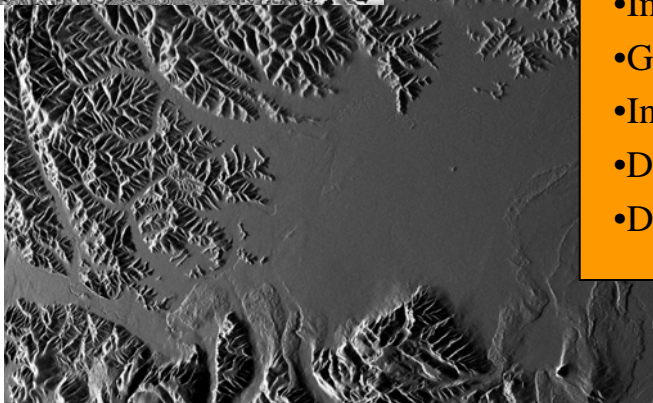
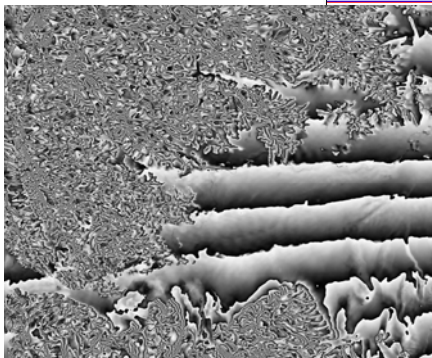
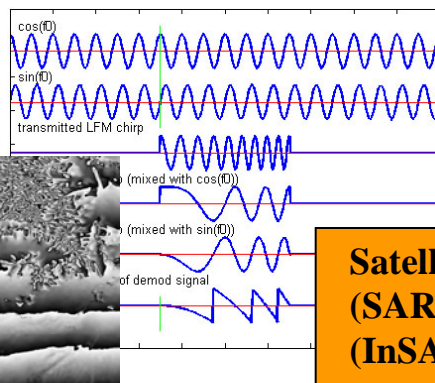
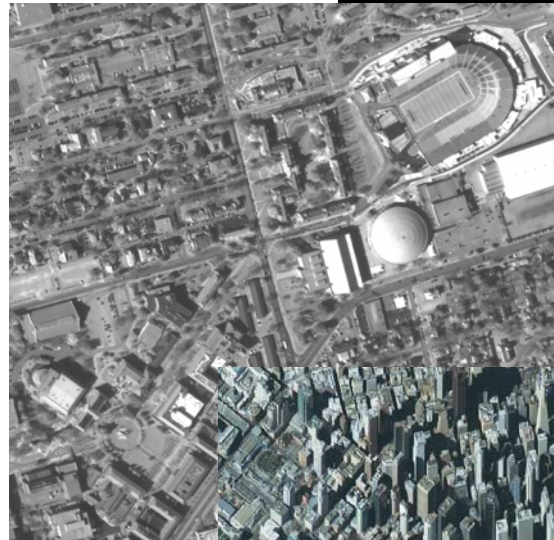
494-6719, [bethel@ecn.purdue.edu](mailto:bethel@ecn.purdue.edu)

Prerequisite: permission of instructor



### Photogrammetry and Mapping with High Resolution Commercial Satellite Imagery

- Radiometry, Resolution
- Rigorous Sensor & Platform Models, Error Propagation
- Replacement Models, RPC Estimation and Use
- Stereo Acquisition
- 3D Scene Reconstruction
- Detailed Analysis of one of Ikonos, Quickbird, Orbview 3, Spot 5, Eros A



### Satellite Based Synthetic Aperture Radar (SAR) Imagery and SAR Interferometry (InSAR / IFSAR)

- Radar Fundamentals
- Signal Characteristics
- Image Formation Algorithms
- Geopositioning and Error Propagation
- Interferometric Processing
- DEM Generation
- Detailed Analysis of ERS 1&2