

# Identifying Data Richness and Data Gaps in the 38-Year Record of Landsat Environmental Holdings

John Faundeen CODATA - October 2010 Stellenbosch, South Africa

# Approach

- ◆ Context
- Overview of Landsat
- ◆ Temporal Examination
- ◆ Summary



### Context

- Department of the Interior
  - ◆ U.S. Geological Survey
    - ◆ Earth Resources Observation and Science Center





### Context

- ◆ Land-Based Science
- Observations
- ◆ Elevation
- ◆ Land Use / Land Cover

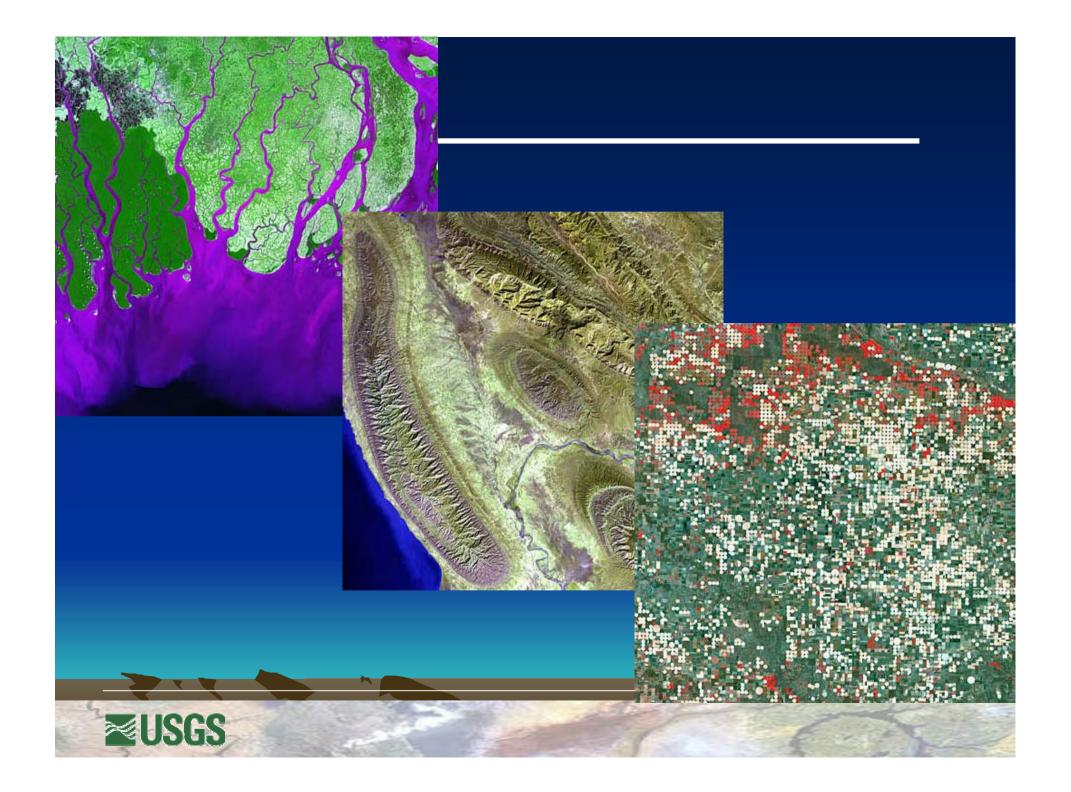




### **Overview of Landsat**

- ◆ First Civilian Program
  - ◆ Large Scale Observations
  - ◆ Land Inventories
  - Mineral Exploration
- ◆ 1972 Launch
  - ◆ Two Sensors
  - ◆ 2.4 M Images
- Subsequent Launches and Sensors
  - ◆ Two Satellites Today
  - ◆ Future Satellites Planned





## **Temporal Examination**

- Repeat Capability
- Change Analysis
  - ◆ Human Activity
  - Natural
- Observations Create One-Time Records
- ♦ 3 Visualizations
  - ◆ Data Gaps vs. Data Richness

