

# Land Cover Indicators for U.S. National Climate Assessments

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Assemble NASA remote sensing data products to provide land cover indicators for U.S. National Climate Assessments (NCA).

- Current Indicator as defined by the NCA
  - One decade of past trends
- Combine MODIS & Thematic Mapper data products to derive a pilot land cover indicator for the NCA.
- Takes advantage of current ACCESS, MEaSUREs, and Carbon Monitoring System projects.

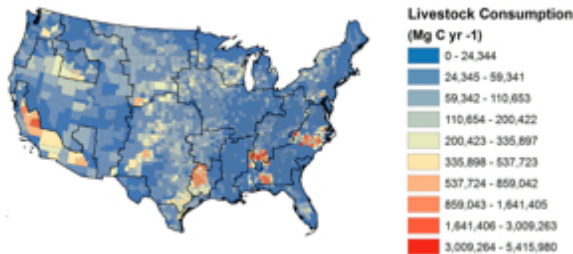
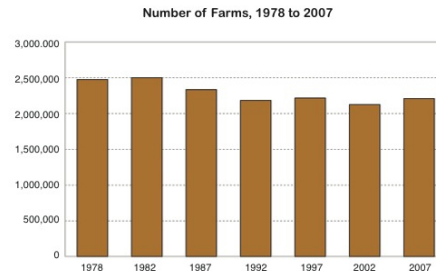
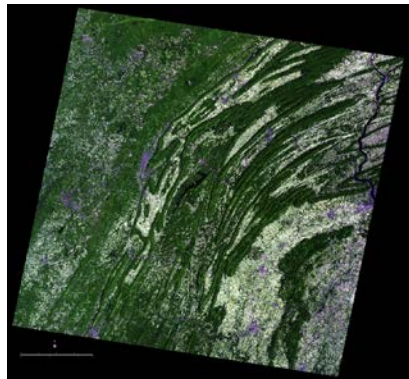
- Data products derived from MODIS and Thematic Mapper observations.
  - Multiple spatial and temporal scales
    - 500 m MODIS; 30 m Landsat
  - 2001 – 2012
  - U.S. data projected onto geographic grid
  - 5' × 5' and 0.5° × 0.5° spatial resolutions
  - Landsat data for selected, representative areas
- Data fusion with inventories and other statistical measures.

Access to visualizations of annual data summaries and distribution of data products through the Global Land Cover Facility.

- Community evaluation of multiple prototypes
  - Pilot indicator visualization and data updated annually as long as interest remains
- Analysis of error and uncertainty imposed by spatial aggregation as well as temporal sampling in the case of Landsat data.



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- **Mosaics of MODIS land cover and vegetation continuous fields data products created by a ACCESS project.**

- 2001 – 2012
- 500 m; 5' x 5'; 0.5° x 0.5°
- USA subsets
- Decade of trends

- **Selected Landsat data for representative areas.**

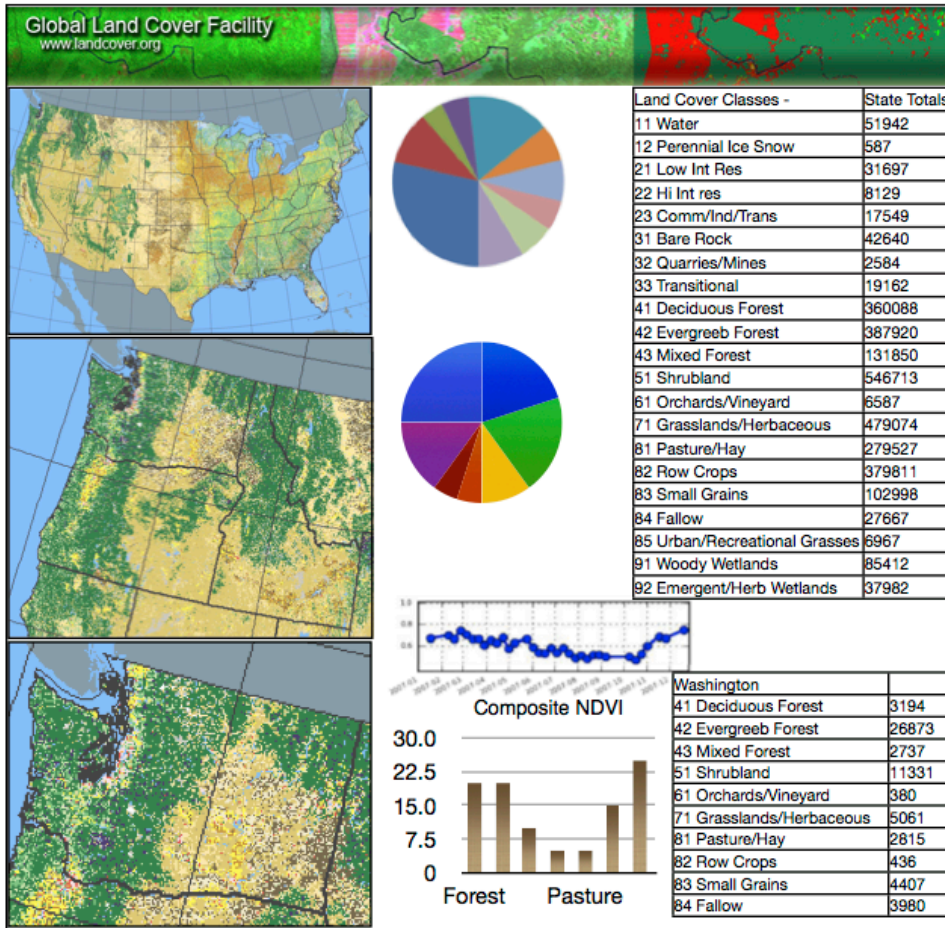
- Prototype for automated selection of areas within MODIS data layers

- **Tabular and geospatial inventory and census data.**

- Agricultural census and survey
- Population census
- U.S. Economic Accounts

- **Derived geostatistical indices characterizing for example fragmentation, heterogeneity, etc.**

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**Pilot visualization combining maps, charts, and statistical summaries.**

- Multiple spatial scales:
  - National
  - Regional
  - State