MODIS NASA
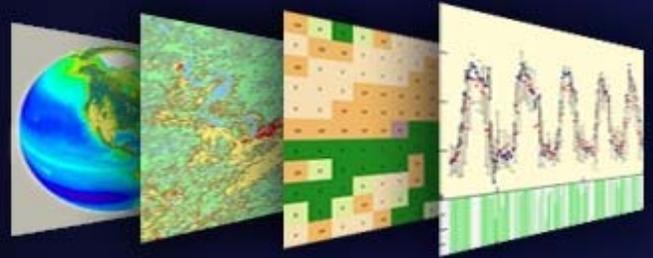# Subsetting and Visualization
Tool for North America
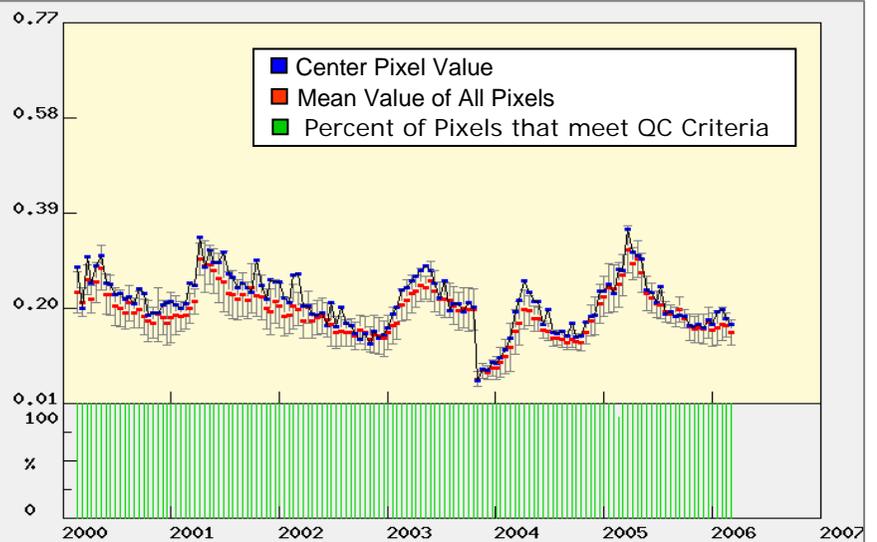
Oak Ridge National Laboratory DAAC

Web Site: http://www.modis.ornl.gov/modis/NorthAmerica_Tool/index.cfm

This web-based interface facilitates the creation of subsets of MODIS Land Products for user-selected 1x1 km up to 201x201 km areas across North America and for user-selected time periods during the MODIS record.
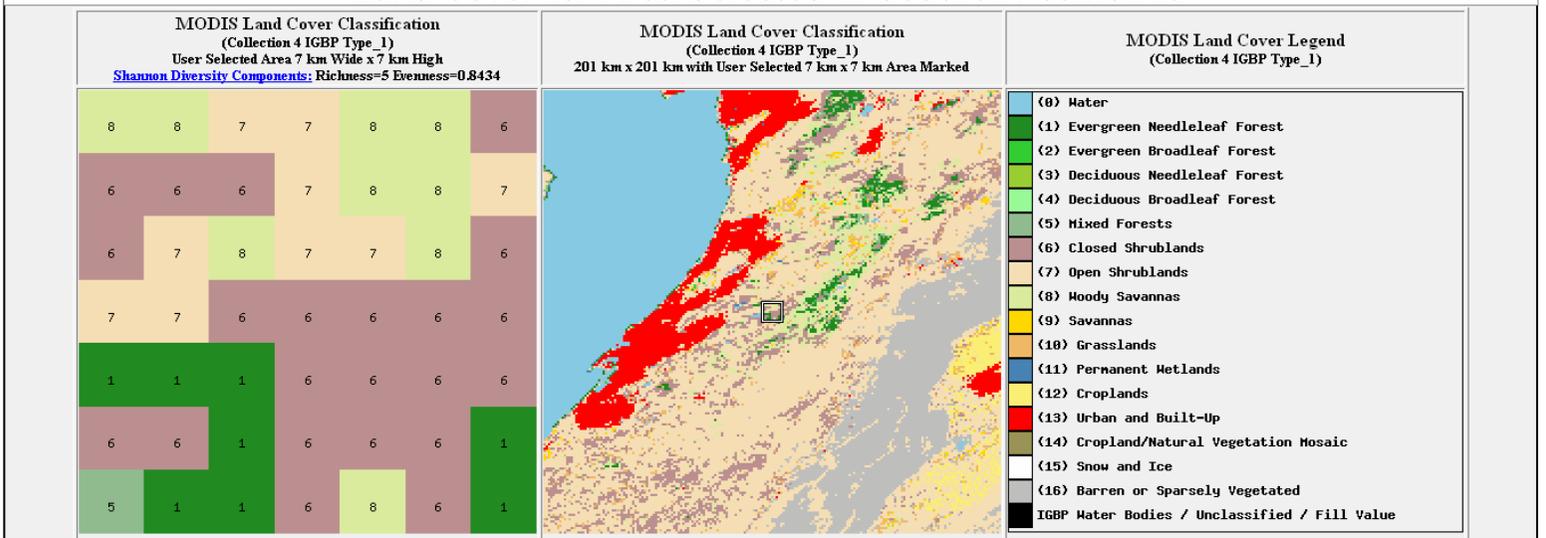
- User selects MODIS Land Product, center coordinates or site, areal extent, and period of interest
- Processing of request takes 10 to 60 minutes for most products
- User receives an email with URL to download data files and view graphics

The tool provides time series plots, ASCII files of the pixel values along with quality information, average and standard deviations of the pixels for the area selected, and a ASCII Grid file that can be imported directly into GIS software.

Vegetation Index, Area in Southern California (EVI MOD13A2)

Legend:
- ■ Center Pixel Value
- ■ Mean Value of All Pixels
- ■ Percent of Pixels that meet QC Criteria

Land Cover for Area Selected in Southern California

MODIS Land Cover Classification
(Collection 4 IGBP Type_1)
User Selected Area 7 km Wide x 7 km High
Shannon Diversity Components: Richness=5 Evenness=0.8434

8	8	7	7	8	8	6
6	6	6	7	8	8	7
6	7	8	7	7	8	6
7	7	6	6	6	6	6
1	1	1	6	6	6	6
6	6	1	6	6	6	1
5	1	1	6	8	6	1

MODIS Land Cover Classification
(Collection 4 IGBP Type_1)
201 km x 201 km with User Selected 7 km x 7 km Area Marked

MODIS Land Cover Legend
(Collection 4 IGBP Type_1)

- (0) Water
- (1) Evergreen Needleleaf Forest
- (2) Evergreen Broadleaf Forest
- (3) Deciduous Needleleaf Forest
- (4) Deciduous Broadleaf Forest
- (5) Mixed Forests
- (6) Closed Shrublands
- (7) Open Shrublands
- (8) Woody Savannas
- (9) Savannas
- (10) Grasslands
- (11) Permanent Wetlands
- (12) Croplands
- (13) Urban and Built-Up
- (14) Cropland/Natural Vegetation Mosaic
- (15) Snow and Ice
- (16) Barren or Sparsely Vegetated
- IGBP Water Bodies / Unclassified / Fill Value

MODIS
ASCII Subsets
Oak Ridge National Laboratory DAAC

Web Site: http://www.modis.ornl.gov/modis/index.cfm

The ORNL DAAC prepares and distributes subsets of selected MODIS (Moderate Resolution Imaging Spectroradiometer) Land Products in a scale and format useful for field researchers.

MODIS Land Products Subsetted
Surface Reflectance
Surface Temperature
Land Cover
Phenology
NDVI / EVI
LAI / fPAR
Net Photosynthesis
Annual NPP
Albedo (Model and Calculated)
Reflectance – BRDF Adjusted

Digital Elevation GTOPO30
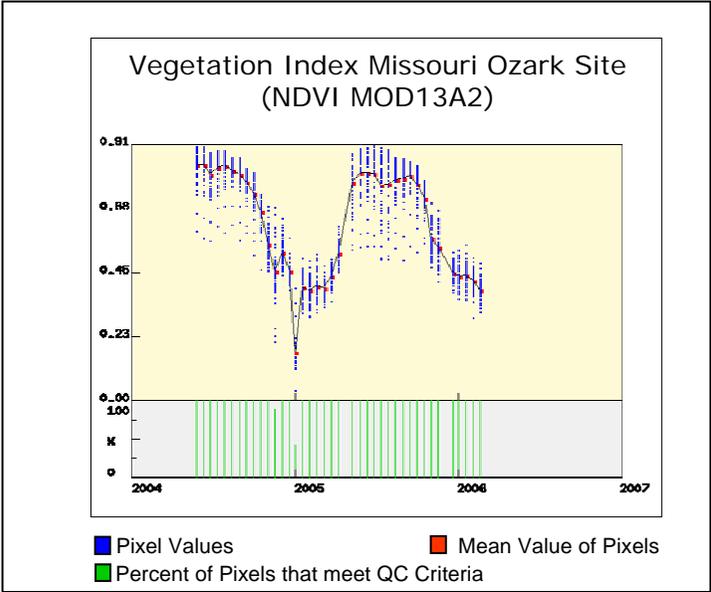
MODIS Sites
October 2005
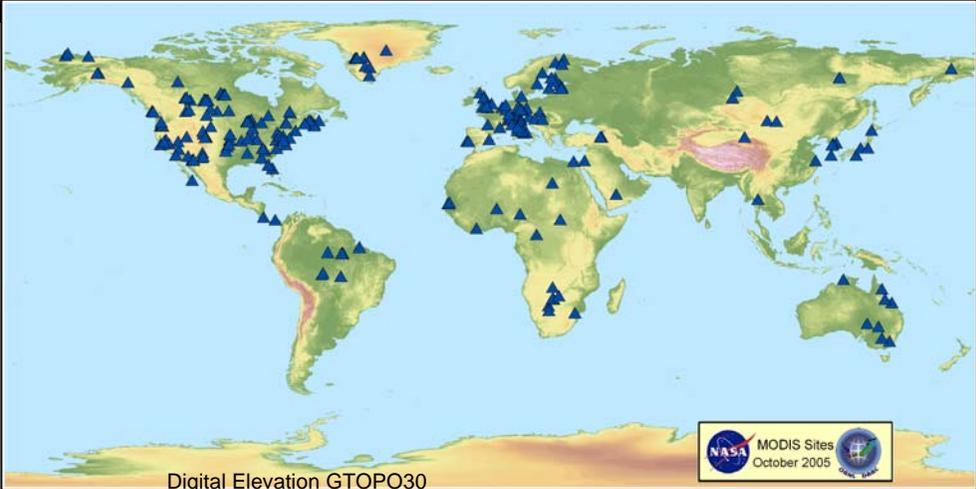
Subsets are provided at 0.5 or 1-km resolution for 7 x 7 km (ASCII) or 31 x 11 km (GeoTIFF) areas at each of 280 field or flux tower sites. In the next processing of MODIS data, the ORNL DAAC will provide subsets for more than 1,000 sites.

We offer several methods to obtain MODIS Subsets:
• Several Picklists (Site, Network, etc.)
• MODIS Product Table
• WebGIS Tool
• GeoTIFF Images
• Google Earth (see example)
• FTP download

Select sites using Google Earth

Missouri Ozark Site
Link to Subsets

Google

Vegetation Index Missouri Ozark Site (NDVI MOD13A2)

■ Pixel Values   ■ Mean Value of Pixels
■ Percent of Pixels that meet QC Criteria

For additional information contact Bob Cook (cookrb@ornl.gov)
Oak Ridge National Laboratory Distributed Active Archive Center
www.daac.ornl.gov