

The Land Product Characterization System (LPCS) Tutorial: A step-by-step guide for users of LPCS.

<https://landsat.cr.usgs.gov/lpcs>

Version 1.1
February 2017



DATE	TIME	WATER	WATER	WATER	WATER
20170201	00	000	0000.000000	0000.000000	0000.000000
20170201	01	000	0000.000000	0000.000000	0000.000000
20170201	02	000	0000.000000	0000.000000	0000.000000
20170201	03	000	0000.000000	0000.000000	0000.000000
20170201	04	000	0000.000000	0000.000000	0000.000000
20170201	05	000	0000.000000	0000.000000	0000.000000
20170201	06	000	0000.000000	0000.000000	0000.000000
20170201	07	000	0000.000000	0000.000000	0000.000000
20170201	08	000	0000.000000	0000.000000	0000.000000
20170201	09	000	0000.000000	0000.000000	0000.000000
20170201	10	000	0000.000000	0000.000000	0000.000000
20170201	11	000	0000.000000	0000.000000	0000.000000
20170201	12	000	0000.000000	0000.000000	0000.000000
20170201	13	000	0000.000000	0000.000000	0000.000000
20170201	14	000	0000.000000	0000.000000	0000.000000
20170201	15	000	0000.000000	0000.000000	0000.000000
20170201	16	000	0000.000000	0000.000000	0000.000000
20170201	17	000	0000.000000	0000.000000	0000.000000
20170201	18	000	0000.000000	0000.000000	0000.000000
20170201	19	000	0000.000000	0000.000000	0000.000000
20170201	20	000	0000.000000	0000.000000	0000.000000
20170201	21	000	0000.000000	0000.000000	0000.000000
20170201	22	000	0000.000000	0000.000000	0000.000000
20170201	23	000	0000.000000	0000.000000	0000.000000



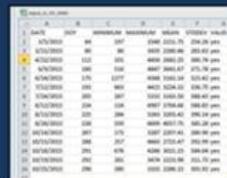
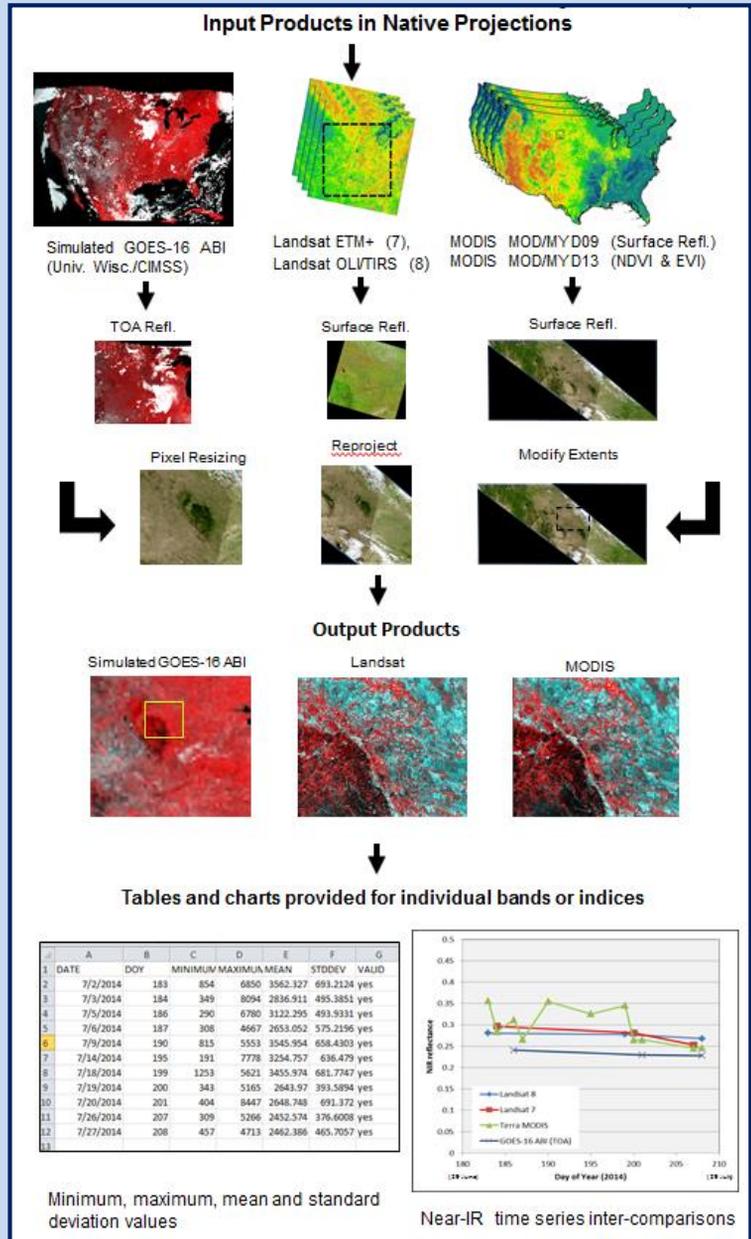
The Land Product Characterization System (LPCS) Tutorial: A step-by-step guide for new users of LPCS.

Introduction

NOAA and the U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center are collaborating on the development of a Land Product Characterization System (LPCS) that will facilitate the application of multi-satellite and in-situ data for characterization and validation of satellite derived land-related products (e.g., Surface Reflectance, Normalized Difference Vegetation Index, and Land Surface Temperature). The system is designed to utilize data and products available and anticipated from the Landsat 8, ESA Sentinel-2 and -3 series of satellites, and other relatively high and medium resolution sensors, to validate GOES-16 Advanced Baseline Imager (ABI) and Suomi National Polar-orbiting Partnership (S-NPP)/Joint Polar Satellite System (JPSS) Visible Infrared Imaging Radiometer Suite (VIIRS) products. When fully implemented, any of the sensor data or products included in the LPCS would be available for comparative analysis.

The LPCS includes data inventory, access, and analysis functions that will permit data to be easily identified, retrieved, co-registered, and compared statistically through a single interface.

<https://landsat.cr.usgs.gov/lpcs>



LPCS introduction/home page is located at:

<https://landsat.cr.usgs.gov/lpcs>

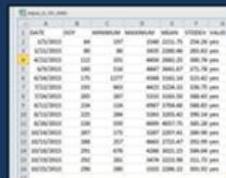
System access (below page) is located at:

<https://lpcsexplorer.cr.usgs.gov>

Registration is required to fully utilize LPCS.



The screenshot displays the LPCS (Land Product Characterization System) website. At the top, there is a header with the LPCS logo, the USGS logo, and the text 'science for a changing world'. Below the header, there is a navigation bar with links for 'Home', 'Login', 'Register', 'RSS', 'Feedback', and 'Help'. The 'Register' button is highlighted with a red box. The main content area is divided into two sections: 'Search Criteria' on the left and a 'Search Criteria Summary' on the right. The 'Search Criteria' section includes a '1. Enter Search Criteria' heading, instructions on how to narrow the search area, and several input fields for 'Address/Place', 'Coordinates', and 'Date Range'. The 'Search Criteria Summary' section shows a map of North America with a search area highlighted in white. The map includes a coordinate display '(73° 10' 33" N, 094° 34' 13" W)' and buttons for 'Map', 'Satellite', 'Options', and 'Overlays'. The bottom of the page features a dark blue banner with the LPCS logo and several small thumbnail images showing satellite imagery and data visualizations.



A more detailed LPCS User Guide is available by selecting "Help" button.



LPCS  **USGS**
science for a changing world
Land Product Characterization System

USGS Home
Contact USGS
Search USGS

Page Expires in 1:54:25

Home | Login | Register |  **Feedback** | **Help**

Clear Criteria

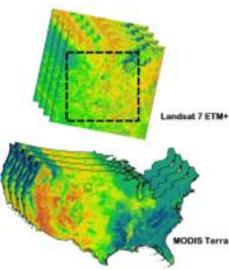
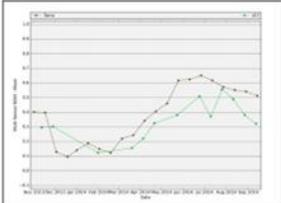
(73° 10' 33" N, 094° 34' 13" W) Options Overlays

Land Product Characterization System (LPCS)

Department of the Interior
U.S. Geological Survey

USER GUIDE

LAND PRODUCT CHARACTERIZATION SYSTEM (LPCS)



Landsat 7 ETM+
MODIS Terra

Version 2.3
November 2016



Land Product Characterization System | Version 2.3

1. Enter Search Criteria
To narrow your search area: type in name, enter coordinates or click the search area (for advanced map tool documentation), and/or choose a date range.

Search Criteria | Data Sets | Additional

Address/Place | Path/Row | Feature

Coordinates | Predefined Area | Calendar

Degree/Minute/Second | Decimal

No coordinates selected.

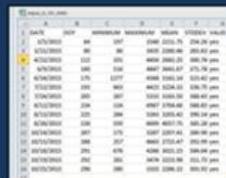
Use Map | Add Coordinates

Date Range | Result Options

Search from: mm/dd/yyyy to: mm/dd/yyyy

Search months: (all)

Data Sets » Additional



Search Criteria tab. Choose area of interest, either using **map (A)**, entering coordinates, or selecting from Predefined Area or Cal/Val sites.

The screenshot displays the LPCS (Land Product Characterization System) web interface. At the top, the header includes the LPCS logo, the USGS logo with the tagline "science for a changing world", and navigation links for "USGS Home", "Contact USGS", and "Search USGS". Below the header, the page title is "Land Product Characterization System (LPCS)" and the page expires in 1:48:19. The main navigation bar contains "Search Criteria", "Data Sets", "Additional Criteria", and "Results". The "Search Criteria" tab is active and highlighted with a yellow box labeled "A".

The "Search Criteria" section includes the following elements:

- 1. Enter Search Criteria**: A section with instructions: "To narrow your search area: type in an address or place name, enter coordinates or click the map to define your search area (for advanced map tools, view the [help documentation](#)), and/or choose a date range." Below this are tabs for "Address/Place", "Path/Row", "Feature", and "Circle".
- Coordinates**: A section with tabs for "Coordinates", "Predefined Area", "Cal/Val Sites", "Shapefile", and "KML". It includes a "Degree/Minute/Second" and "Decimal" radio button. A list of four coordinates is shown, each with a trash icon and a red 'X' icon:
 - 1. Lat: 59.1759, Lon: -124.9805
 - 2. Lat: 58.9046, Lon: -100.7227
 - 3. Lat: 43.0689, Lon: -97.0313
 - 4. Lat: 42.6824, Lon: -116.7188Below the list are buttons for "Use Map", "Add Coordinate", and "Clear Coordinates".
- Date Range**: A section with "Date Range" and "Result Options" tabs. It includes input fields for "Search from:" and "to:" in "mm/dd/yyyy" format, and a "Search months:" dropdown menu set to "(all)".

The "Search Criteria Summary (Show)" section on the right features a "Clear Criteria" button and a map. The map shows the United States with a red rectangular search area. The map is labeled "Map" and "Satellite" with a "Map" button. The coordinates "(48.3416, -51.6797)" are displayed in the top right corner of the map area, along with "Options" and "Overlays" buttons.



This figure is a screenshot of the LPCS web interface showing a data table. The table has columns for "Date", "Value", and "Unit". The data is organized into rows, with the first row being a header row. The table contains numerical data points for various dates and values.



Search Criteria tab. Choose area of interest, either using map, **entering coordinates (B)**, or selecting from Predefined Area or Cal/Val sites.

The screenshot displays the Land Product Characterization System (LPCS) web interface. The top navigation bar includes the USGS logo and the text "science for a changing world". The main header reads "Land Product Characterization System (LPCS)". On the right, there are links for "USGS Home", "Contact USGS", and "Search USGS", along with a "Page Expires In 1:45:20" indicator. Below the header, there are tabs for "Search Criteria", "Data Sets", "Additional Criteria", and "Results". The "Search Criteria" tab is active, showing a section titled "1. Enter Search Criteria" with instructions: "To narrow your search area: type in an address or place name, enter coordinates or click the map to define your search area (for advanced map tools, view the [help documentation](#)), and/or choose a date range." Below this are input fields for "Address/Place", "Path/Row", "Feature", and "Circle". A "Show" button is present. Further down, there are tabs for "Coordinates", "Predefined Area", "Cal/Val Sites", and "Shapefile". The "Coordinates" tab is selected, showing a "Degree/Minute/Second" and "Decimal" format selector. A message states "No coordinates selected." A yellow box with the letter "B" highlights the "Add Coordinate" button. A "Date Range" section includes "Search from:" and "to:" fields with a calendar icon, and a "Search months:" dropdown. At the bottom of the search criteria section are "Data Sets", "Additional Criteria", and "Results" buttons. On the right side, there is a "Search Criteria Summary (Show)" section with a "Clear Criteria" button. Below this is a map with "Map" and "Satellite" buttons, and a coordinate display showing "(30.2970, -164.1797)". A "Map" dialog box is open in the foreground, titled "Add New Coordinate", with fields for "Latitude:" and "Longitude:", and "Add" and "Cancel" buttons.



ID	NAME	TYPE	STATUS	UTM_ZONE	UTM_ZONE	UTM_ZONE
1	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
2	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
3	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
4	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
5	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
6	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
7	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
8	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
9	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
10	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
11	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
12	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
13	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
14	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
15	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
16	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
17	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
18	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
19	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000
20	1000000000	000	000	000000000000000000	000000000000000000	000000000000000000



Search Criteria tab. Choose area of interest, either using map, entering coordinates, or selecting from **Predefined Area or Cal/Val sites (C)**.

LPCS USGS science for a changing world Land Product Characterization System

USGS Home Contact USGS Search USGS

Land Product Characterization System (LPCS) Page Expires in 1:43:29

Home Login Register RSS Feedback Help

Search Criteria Data Sets Additional Criteria Results

Search Criteria Summary (Show) Clear Criteria

Map Satellite (49.1530, -161.7188) Options Overlays

1. Enter Search Criteria
To narrow your search area, type in an address or place name, enter coordinates or click the map to define your search area (for advanced map tools, view the [help documentation](#)), and/or choose a date range.

Address/Place Path/Row Feature Circle Show

Coordinates Predefined **C** Cal/Val Sites Shapefile

Date Range Result Options

Search from: mm/dd/yyyy to: mm/dd/yyyy

Search months: (all)

Data Sets » Additional Criteria » Results »

Add Cal/Val Site

Type

- Select One
- Select One
- AERONET
- NEON Relocatable Terrestrial
- NEON Core Terrestrial
- USCRN
- SURFRAD**
- EOS Land Validation Core Sites



Date	Value	Units
2010-01-01	100	mm
2010-02-01	150	mm
2010-03-01	200	mm
2010-04-01	250	mm
2010-05-01	300	mm
2010-06-01	350	mm
2010-07-01	400	mm
2010-08-01	450	mm
2010-09-01	500	mm
2010-10-01	550	mm
2010-11-01	600	mm
2010-12-01	650	mm



Search Criteria tab. Choose area of interest, either using map, entering coordinates, or selecting from Predefined Area or Cal/Val sites (C).

The screenshot shows the USGS Land Product Characterization System (LPCS) website. The browser address bar is ipcexplorer.cr.usgs.gov. The page title is "Land Product Characterization System (LPCS)". The "Search Criteria" tab is active. A dropdown menu titled "Add Cal/Val Site" is open, showing a list of sites. A yellow box with the letter "C" highlights the "Cal/Val Sites" option in the search criteria section.

Add Cal/Val Site

Type: SURFRAD

Cal/Val Site:

- Bondville, Illinois
- Bondville, Illinois
- Table Mountain, Boulder, Colorado
- Desert Rock, Nevada
- Fort Peck, Montana
- Goodwin Creek, Mississippi
- Penn. State Univ., Pennsylvania
- Sioux Falls, South Dakota
- ARM Southern Great Plains Facility, Oklahoma



DATE	TIME	TEMPERATURE	WINDSPEED	WINDDIRECTION	WINDGUST	WINDVELOCITY	WINDVELOCITY
2012/01/01	00	1000	1000	1000	1000	1000	1000
2012/01/01	01	1000	1000	1000	1000	1000	1000
2012/01/01	02	1000	1000	1000	1000	1000	1000
2012/01/01	03	1000	1000	1000	1000	1000	1000
2012/01/01	04	1000	1000	1000	1000	1000	1000
2012/01/01	05	1000	1000	1000	1000	1000	1000
2012/01/01	06	1000	1000	1000	1000	1000	1000
2012/01/01	07	1000	1000	1000	1000	1000	1000
2012/01/01	08	1000	1000	1000	1000	1000	1000
2012/01/01	09	1000	1000	1000	1000	1000	1000
2012/01/01	10	1000	1000	1000	1000	1000	1000
2012/01/01	11	1000	1000	1000	1000	1000	1000
2012/01/01	12	1000	1000	1000	1000	1000	1000
2012/01/01	13	1000	1000	1000	1000	1000	1000
2012/01/01	14	1000	1000	1000	1000	1000	1000
2012/01/01	15	1000	1000	1000	1000	1000	1000
2012/01/01	16	1000	1000	1000	1000	1000	1000
2012/01/01	17	1000	1000	1000	1000	1000	1000
2012/01/01	18	1000	1000	1000	1000	1000	1000
2012/01/01	19	1000	1000	1000	1000	1000	1000
2012/01/01	20	1000	1000	1000	1000	1000	1000
2012/01/01	21	1000	1000	1000	1000	1000	1000
2012/01/01	22	1000	1000	1000	1000	1000	1000
2012/01/01	23	1000	1000	1000	1000	1000	1000



Search Criteria tab. *In this example the Cal/Val Sites criteria was used to select a location of interest for search of available satellite data (Bondville, IL). Choose **Date Range (D)** to select range of dates for retrieval of satellite data.*

LPCS **USGS**
science for a changing world
Land Product Characterization System

USGS Home
Contact USGS
Search USGS

Land Product Characterization System (LPCS) Page Expires In 1:55:52 C

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov Feedback Help

Search Criteria Data Sets Additional Criteria Results

1. Enter Search Criteria

To narrow your search area: type in an address or place name, enter coordinates or click the map to define your search area (for advanced map tools, view the [help documentation](#)), and/or choose a date range.

Address/Place Path/Row Feature Circle

Show Clear

Coordinates Predefined Area Cal/Val Sites Shapefile KML

Degree/Minute/Second Decimal

1. Lat: 40.0519, Lon: -88.3731

Use Map Add Coordinate Clear Coordinates

Date Range Result Options

Search from: 04/01/2015 to: 09/30/2015

months: (all)

Data Sets » Additional Criteria » Results »

Search Criteria Summary (Show) Clear Criteria

Map Satellite (74.2544, -134.8413) Options Overlays

Google

Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Date	Lat	Lon	Value
04/01/2015	40.0519	-88.3731	...
04/02/2015	40.0519	-88.3731	...
04/03/2015	40.0519	-88.3731	...
04/04/2015	40.0519	-88.3731	...
04/05/2015	40.0519	-88.3731	...
04/06/2015	40.0519	-88.3731	...
04/07/2015	40.0519	-88.3731	...
04/08/2015	40.0519	-88.3731	...
04/09/2015	40.0519	-88.3731	...
04/10/2015	40.0519	-88.3731	...
04/11/2015	40.0519	-88.3731	...
04/12/2015	40.0519	-88.3731	...
04/13/2015	40.0519	-88.3731	...
04/14/2015	40.0519	-88.3731	...
04/15/2015	40.0519	-88.3731	...
04/16/2015	40.0519	-88.3731	...
04/17/2015	40.0519	-88.3731	...
04/18/2015	40.0519	-88.3731	...
04/19/2015	40.0519	-88.3731	...
04/20/2015	40.0519	-88.3731	...
04/21/2015	40.0519	-88.3731	...
04/22/2015	40.0519	-88.3731	...
04/23/2015	40.0519	-88.3731	...
04/24/2015	40.0519	-88.3731	...
04/25/2015	40.0519	-88.3731	...
04/26/2015	40.0519	-88.3731	...
04/27/2015	40.0519	-88.3731	...
04/28/2015	40.0519	-88.3731	...
04/29/2015	40.0519	-88.3731	...
04/30/2015	40.0519	-88.3731	...



Recommended that **Result Options** is increased from default value (100 records) if anticipate reviewing/ordering daily data or large number of scenes.

LPCS Land Product Characterization System

USGS Home
Contact USGS
Search USGS

Page Expires In 1:59:12

Home Save Criteria Load Favorite Manage Criteria Item Basket (9) kgallo@usgs.gov Feedback Help

Search Criteria Data Sets Additional Criteria Results

1. Enter Search Criteria

To narrow your search area: type in an address or place name, enter coordinates or click the map to define your search area (for advanced map tools, view the [help documentation](#)), and/or choose a date range.

Address/Place Path/Row Feature City

Show Clear

Coordinates Predefined Area Calculated Sites Shapefile KML

Degree/Minute/Second Decimal

1. Lat: 40.0519, Lon: -88.3771

Use Map Add Coordinate Clear Coordinates

Date Range Result Options

Standard Search

Number of records to return: 500

Data Sets » Additional Criteria » Results »

Search Criteria Summary (Show)

Clear Criteria

Map Satellite (35.8782, -161.7358) Options Overlays

Google

Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Date	Time	Value	Value	Value	Value
2016-08-01	00:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	01:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	02:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	03:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	04:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	05:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	06:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	07:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	08:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	09:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	10:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	11:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	12:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	13:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	14:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	15:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	16:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	17:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	18:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	19:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	20:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	21:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	22:00	0.000000	0.000000	0.000000	0.000000
2016-08-01	23:00	0.000000	0.000000	0.000000	0.000000



Data Sets tab. Choose satellite data of interest. Currently only Landsat (A) and MODIS (B) products are available for enhanced processing. A “+” symbol next to data set indicates additional information is available.

LPCS Land Product Characterization System

USGS Home Contact USGS Search USGS

Page Expires In 1:59:44

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov Feedback Help

Search Criteria **Data Sets** Additional Criteria Results

2. Select Your Data Set(s)

Check the boxes for the data set(s) you want to search. When done selecting data set(s), click the *Additional Criteria* or *Results* buttons below. Click the plus sign next to the category name to show a list of data sets.

Use Data Set Prefilter (What's This?)

Data Set Search:

A

- GOES-R
- Landsat Archive
 - Pre-Collection
 - Landsat Surface Reflectance - L8 OLI/TIRS
 - Landsat Surface Reflectance - L7 ETM+
 - Landsat Surface Reflectance - L4-5 TM

B

- NASA LPDAAC Collections (MODIS)
 - MODIS Vegetation Indices
 - MODIS Land Cover
 - MODIS Land Surface Reflectance
 - LPCS - MODIS MOD09A1
 - LPCS - MODIS MOD09GA
 - LPCS - MODIS MOD09GQ
 - LPCS - MODIS MOD09Q1
 - LPCS - MODIS MYD09A1
 - LPCS - MODIS MYD09GA
 - LPCS - MODIS MYD09GQ
 - LPCS - MODIS MYD09Q1
 - MODIS Land Surface Temp and Emiss
 - MODIS Albedo
- VIIRS

Clear All Selected Additional Criteria Results

Search Criteria Summary (Show) Clear Criteria

Map Satellite (38,9442, -40,7983) Options Overlays

Google

Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



DATE	TIME	MODIS MOD09GQ	MODIS MOD09GA	MODIS MOD09A1	MODIS MOD09Q1
20160801	0000	0.0000	0.0000	0.0000	0.0000
20160801	0100	0.0000	0.0000	0.0000	0.0000
20160801	0200	0.0000	0.0000	0.0000	0.0000
20160801	0300	0.0000	0.0000	0.0000	0.0000
20160801	0400	0.0000	0.0000	0.0000	0.0000
20160801	0500	0.0000	0.0000	0.0000	0.0000
20160801	0600	0.0000	0.0000	0.0000	0.0000
20160801	0700	0.0000	0.0000	0.0000	0.0000
20160801	0800	0.0000	0.0000	0.0000	0.0000
20160801	0900	0.0000	0.0000	0.0000	0.0000
20160801	1000	0.0000	0.0000	0.0000	0.0000
20160801	1100	0.0000	0.0000	0.0000	0.0000
20160801	1200	0.0000	0.0000	0.0000	0.0000
20160801	1300	0.0000	0.0000	0.0000	0.0000
20160801	1400	0.0000	0.0000	0.0000	0.0000
20160801	1500	0.0000	0.0000	0.0000	0.0000
20160801	1600	0.0000	0.0000	0.0000	0.0000
20160801	1700	0.0000	0.0000	0.0000	0.0000
20160801	1800	0.0000	0.0000	0.0000	0.0000
20160801	1900	0.0000	0.0000	0.0000	0.0000
20160801	2000	0.0000	0.0000	0.0000	0.0000
20160801	2100	0.0000	0.0000	0.0000	0.0000
20160801	2200	0.0000	0.0000	0.0000	0.0000
20160801	2300	0.0000	0.0000	0.0000	0.0000



Data Sets tab. Choose satellite data of interest. In this example **Landsat 8 Surface Reflectance (A)** and **MODIS daily Surface Reflectance (B)** products are selected as indicated by checked box.

The screenshot displays the 'Data Sets' tab in the Land Product Characterization System (LPCS). The interface includes a search criteria summary, a map, and a list of data sets. Two data sets are selected, indicated by checked boxes and yellow labels 'A' and 'B'.

2. Select Your Data Set(s)
Check the boxes for the data set(s) you want to search. When done selecting data set(s), click the *Additional Criteria* or *Results* buttons below. Click the plus sign next to the category name to show a list of data sets.

Use Data Set Prefilter ([What's This?](#))

Data Set Search:

Landsat Surface Reflectance - L8 OLI/TIRS (A)

Landsat Surface Reflectance - L7 ETM+

Landsat Surface Reflectance - L4-5 TM

NASA LPDAAC Collections (MODIS)

MODIS Vegetation Indices

MODIS Land Cover

MODIS Land Surface Reflectance

LPCS - MODIS MOD09A1 (B)

LPCS - MODIS MOD09GA

LPCS - MODIS MOD09GQ

LPCS - MODIS MOD09Q1

LPCS - MODIS MYD09A1

LPCS - MODIS MYD09GA

LPCS - MODIS MYD09GQ

LPCS - MODIS MYD09Q1

MODIS Land Surface Temp and Emiss

MODIS Albedo

VIIRS

Buttons:

Search Criteria Summary (Show)

Map Satellite (38,9442, -40,7983) Options Overlays

Google
Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Results tab. Browse images for each data set selected will be displayed.



LPCS USGS
Land Product Characterization System
science for a changing world

USGS Home
Contact USGS
Search USGS

Land Product Characterization System (LPCS) Page Expires In 1:59:38

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov RSS Feedback Help

Search Criteria Data Sets Additional Criteria **Results**

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
Landsat Surface Reflectance - L8 OLI/TIRS

« First Previous 1 Next Last »
Displaying 1 - 23 of 23

- 1 Entity ID:LC80230322015269LGN00
Coordinates:40.33282,-88.78004
Acquisition Date:26-SEP-15
Path:23
Row:32
- 2 Entity ID:LC80220322015262LGN00
Coordinates:40.33283,-87.23428
Acquisition Date:19-SEP-15
Path:22
Row:32
- 3 Entity ID:LC80230322015253LGN00
Coordinates:40.33275,-88.77062
Acquisition Date:10-SEP-15
Path:23
Row:32
- 4 Entity ID:LC80220322015246LGN00
Coordinates:40.33288,-87.21638
Acquisition Date:03-SEP-15
Path:22

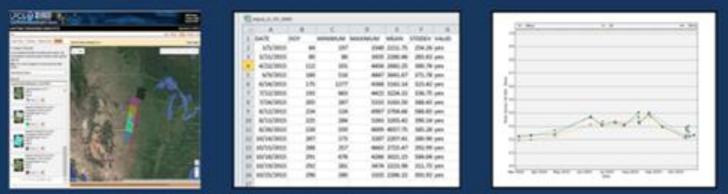
View Item Basket

Search Criteria Summary (Show) Clear Criteria

Map Satellite (58.8036,-35.7007) Options Overlays

Google Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Results tab. Browse images for each data set selected will be displayed. Toggle to other data sets selected in Search Criteria by selecting in **Data Set** window (currently viewing MODIS scenes selected based on search criteria).

The screenshot displays the LPCS web interface. At the top, there is a navigation bar with 'Home', 'Save Criteria', 'Load Favorite', and 'Manage Criteria'. The main content area is divided into a left sidebar and a main map area. The sidebar contains a 'Search Results' section with a 'Data Set' dropdown menu currently set to 'LPCS - MODIS MOD09GQ'. Below this, five search results are listed, each with a thumbnail image, entity ID, coordinates, and acquisition date. The main map area shows a satellite view of North America with a red location pin. A red arrow points from the text above to the 'Data Set' dropdown menu in the sidebar.

4. Search Results
If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
LPCS - MODIS MOD09GQ

« First » Previous 1 ▼ Next » Last »

Displaying 1 - 100 of 100

- Entity ID: MOD09GQ.A2015273.h11v04.005
Coordinates: 45.0739, -93.2312
Acquisition Date: 30-SEP-15
- Entity ID: MOD09GQ.A2015273.h11v05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 30-SEP-15
- Entity ID: MOD09GQ.A2015272.h11v04.005
Coordinates: 45.0739, -93.2312
Acquisition Date: 29-SEP-15
- Entity ID: MOD09GQ.A2015272.h11v05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 29-SEP-15
- Entity ID: MOD09GQ.A2015271.h11v04.005
Coordinates: 45.1124, -93.5218
Acquisition Date: 28-SEP-15

View Item Basket »

Search Criteria Summary (Show) Clear Criteria

Map Satellite (74.0142, -83.1616) Options Overlays

Google

Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

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Results tab. Browse images for each data set selected will be displayed. Toggle to other data sets selected in Search Criteria by selecting in **Data Set** window (currently viewing Landsat scenes selected).

LPCS Land Product Characterization System

USGS Home Contact USGS Search USGS

Page Expires In 1:59:53

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov RSS Feedback Help

Search Criteria Data Sets Additional Criteria Results

Search Criteria Summary (Show) Clear Criteria

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set

Landsat Surface Reflectance - L8 OLI/TIRS

« First Previous 1 2 3 4 Next Last »

Displaying 1 - 25 of 25

- 

Entity ID:LC80230322015269LGN00
Coordinates:40.33282,-88.78004
Acquisition Date:26-SEP-15
Path:23
Row:32


- 

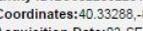
Entity ID:LC80220322015262LGN00
Coordinates:40.33283,-87.23428
Acquisition Date:19-SEP-15
Path:22
Row:32


- 

Entity ID:LC80230322015253LGN00
Coordinates:40.33275,-88.77062
Acquisition Date:10-SEP-15
Path:23
Row:32


- 

Entity ID:LC80220322015246LGN00
Coordinates:40.33288,-87.21638
Acquisition Date:03-SEP-15
Path:22



View Item Basket »

Map Satellite (69.6503,-37.1069) Options Overlays

Google

Map data ©2016 INEGI Imagery ©2016 NASA, TerraMetrics 1000 km Terms of Use

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Entity ID	Coordinates	Acquisition Date	Path	Row
LC80230322015269LGN00	40.33282,-88.78004	26-SEP-15	23	32
LC80220322015262LGN00	40.33283,-87.23428	19-SEP-15	22	32
LC80230322015253LGN00	40.33275,-88.77062	10-SEP-15	23	32
LC80220322015246LGN00	40.33288,-87.21638	03-SEP-15	22	



Results tab. Selection of scene *footprint* icon will overlay the footprint of scene on the map that displays the defined search location.

The screenshot displays the LPCS web interface. At the top, the header includes the USGS logo and the text "LPCS Land Product Characterization System" and "USGS Home Contact USGS Search USGS". Below the header, navigation links include "Home", "Save Criteria", "Load Favorite", and "Manage Criteria". The main content area is divided into a left sidebar and a right map area.

Left Sidebar (Search Results):

- 4. Search Results**
If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.
- Show Result Controls** (dropdown menu)
- Data Set**
Landsat Surface Reflectance - L8 OLI/TIRS
- « First < Previous 1 Next > Last »
- Displaying 1 - 23 of 23
- Entity ID: LC80230322015269LGND0
Coordinates: 40.33282, -88.78004
Acquisition Date: 26-SEP-15
Path: 23
Row: 32
- Entity ID: LC80220322015262LGND0
Coordinates: 40.33283, -87.23428
Acquisition Date: 19-SEP-15
Path: 22
Row: 32
- Entity ID: LC80230322015253LGND0
Coordinates: 40.33275, -88.77062
Acquisition Date: 10-SEP-15
Path: 23
Row: 32
- Entity ID: LC80220322015246LGND0
Coordinates: 40.33288, -87.21638
Acquisition Date: 03-SEP-15
Path: 22
- View Item Basket >**

Right Map Area (Search Criteria Summary):

- Search Criteria Summary (Show)** | **Clear Criteria**
- Map | Satellite
- Coordinates: (43.2203, -85.0682) | Options | Overlays
- A green rectangular footprint is overlaid on the map, centered over the Chicago area in Illinois.
- Map data © 2016 Google, INEGI Imagery © 2016 TerraMetrics | 50 km | Terms of Use | Report a map error



Results tab. Selection of scene *browse overlay* icon will overlay the browse image on the map that displays the defined search area.

The screenshot displays the LPCS (Land Product Characterization System) web interface. At the top, the USGS logo and 'science for a changing world' tagline are visible. The main header reads 'Land Product Characterization System (LPCS)'. Navigation links include 'Home', 'Save Criteria', 'Load Favorite', and 'Manage Criteria'. A search bar contains 'kgallo@usgs.gov'. The 'Results' tab is active, showing '4. Search Results'. Below this, a 'Data Set' dropdown is set to 'Landsat Surface Reflectance - L8 OLI/TIRS'. A list of search results is shown, with the first result selected. A blue arrow points from the 'browse overlay' icon in the first result's action bar to a corresponding overlay on a map of the Chicago area. The map shows a satellite view with a semi-transparent overlay box over a specific geographic area. The interface also includes a 'Search Criteria Summary' panel and a 'View Item Basket' button.

USGS Home
Contact USGS
Search USGS

Page Expires In 1:55:37

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov RSS Feedback Help

Search Criteria Data Sets Additional Criteria Results

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
Landsat Surface Reflectance - L8 OLI/TIRS

« First « Previous 1 Next Last »

Displaying 1 - 23 of 23

1
Entity ID:LC80230322015269LGN00
Coordinates:40.33282,-88.78004
Acquisition Date:26-SEP-15
Path:23
Row:32
[Browse Overlay Icon]

2
Entity ID:LC80220322015262LGN00
Coordinates:40.33283,-87.23428
Acquisition Date:19-SEP-15
Path:22
Row:32

3
Entity ID:LC80230322015253LGN00
Coordinates:40.33275,-88.77062
Acquisition Date:10-SEP-15
Path:23
Row:32

4
Entity ID:LC80220322015246LGN00
Coordinates:40.33288,-87.21638
Acquisition Date:03-SEP-15
Path:22

View Item Basket »

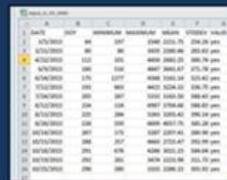
Search Criteria Summary (Show) Clear Criteria

Map Satellite (40.6297,-93.1871) Options Overlays

MISSOURI INDIANA KENTUCKY

Google Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics | 50 km Terms of Use Report a map error

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



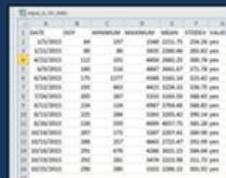
Results tab. Browse image can be enlarged through magnification within Search Criteria Summary map.

The screenshot displays the USGS Land Product Characterization System (LPCS) interface. At the top, the header includes the LPCS and USGS logos, the tagline "science for a changing world", and navigation links for "USGS Home", "Contact USGS", and "Search USGS". Below the header, a navigation bar contains "Home", "Save Criteria", "Load Favorite", "Manage Criteria", "Item Basket (0)", "kgallo@usgs.gov", "RSS", "Feedback", and "Help".

The main content area is divided into two panels. The left panel, titled "4. Search Results", contains a search criteria dropdown set to "Landsat Surface Reflectance - L8 OLI/TIRS". It lists four search results, each with a thumbnail image and metadata:

- Result 1: Entity ID: LC80230322015269LGN00, Coordinates: 40.33282, -88.78004, Acquisition Date: 26-SEP-15, Path: 23, Row: 32.
- Result 2: Entity ID: LC80220322015262LGN00, Coordinates: 40.33283, -87.23428, Acquisition Date: 19-SEP-15, Path: 22, Row: 32.
- Result 3: Entity ID: LC80230322015253LGN00, Coordinates: 40.33275, -88.77062, Acquisition Date: 10-SEP-15, Path: 23, Row: 32.
- Result 4: Entity ID: LC80220322015246LGN00, Coordinates: 40.33288, -87.21638, Acquisition Date: 03-SEP-15, Path: 22, Row: 32.

A "View Item Basket" button is located at the bottom of the results list. The right panel, titled "Search Criteria Summary", shows a map of the region with a large brown rectangular area overlaid, representing the search area. The map includes labels for various cities and towns such as Davenport, Moline, Galesburg, Knoxville, Jacksonville, and Effingham. A blue arrow points from the top right of the page towards the map's zoom controls, which are circled in red. The zoom controls include a plus sign for zooming in and a minus sign for zooming out.



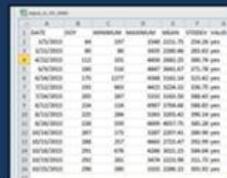
Results tab. Alternatively, the browse image and ancillary scene information can be viewed through selection of the *meta data and browse icon*.

The screenshot displays the USGS Land Product Characterization System (LPCS) interface. At the top, the header includes the LPCS and USGS logos, the text "science for a changing world", and navigation links for "USGS Home", "Contact USGS", and "Search USGS". The main navigation bar contains "Home", "Save Criteria", "Load Favorite", "Manage Criteria", "Item Basket (0)", "kgallo@usgs.gov", "RSS", "Feedback", and "Help". A "Page Expires In 1:51:29" timer is also present.

The interface is divided into two main sections. On the left, the "Results" tab is active, showing a list of search results. The first result is highlighted, and a blue arrow points to the "Browse" icon (a magnifying glass over a document) in the row of icons below the result details. The "Data Set" dropdown is set to "Landsat Surface Reflectance - L8_TIRS".

On the right, the "Search Criteria Summary" section shows a map of the central United States with a green rectangular search area centered over the Chicago region. The map includes labels for major cities like Milwaukee, Chicago, St. Louis, and Indianapolis, and states like Missouri, Indiana, and Kentucky. A coordinate box in the top right of the map shows (39.4607, -84.2662). The map is powered by Google Maps, with a copyright notice for 2016.

At the bottom of the interface, there are four small thumbnail images: a globe, a satellite image, a map, and a line graph, representing different data visualization options available in the system.



Results tab. The browse image and ancillary scene information viewed through selection of the *meta data and browse icon*.

The screenshot displays the USGS Land Product Characterization System (LPCS) interface. At the top, the header includes the LPCS logo, the USGS logo with the tagline "science for a changing world", and navigation links for "USGS Home", "Contact USGS", and "Search USGS". Below the header, the page title is "Land Product Characterization System (LPCS)" and the page expires in 1:50:19. The main navigation bar includes "Home", "Save Criteria", "Load Favorite", "Manage Criteria", "Item Basket (0)", "kgallo@usgs.gov", "Feedback", and "Help".

The "Results" tab is active, showing "Search Criteria Summary (Show)" and "Clear Criteria". The search results are displayed in a list format under the heading "4. Search Results". The first result is selected, showing a small thumbnail image and the following metadata:

- Entity ID: LC80230322015269LGN00
- Coordinates: 40.33288, -87.21638
- Acquisition Date: 03-SEP-15
- Path: 23
- Row: 32

A "Full Display of LC80230322015269LGN00" window is open, showing a "LandsatLook 'Natural Color' Preview Image" of a landscape with a river and forested areas. The window includes a "Click image to view in another window" instruction and a "1 / 2" indicator. Below the image is a table with the following structure:

Data Set Attribute	Attribute Value

Buttons for "Open New Window" and "Close" are located at the bottom of the window. The background shows a Google Map of the region, with labels for "MISSOURI", "INDIANA", and "KENTUCKY". The URL at the bottom left is https://lta.cr.usgs.gov/landsat_dictionary.html#entity_id.

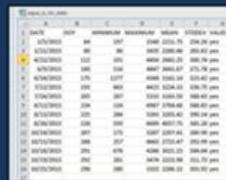


Results tab. The browse image and ancillary scene information viewed through selection of the *meta data* and browse icon.

The screenshot displays the Land Product Characterization System (LPCS) web interface. At the top, the USGS logo and 'science for a changing world' tagline are visible. The main navigation bar includes 'Home', 'Save Criteria', 'Load Favorite', and 'Manage Criteria'. A search criteria summary is shown, and a popup window titled 'Full Display of LC80230322015269LGN00' is open, displaying the following metadata:

Data Set Attribute	Attribute Value
Landsat Scene Identifier	LC80230322015269LGN00
WRS Path	023
WRS Row	032
Target WRS Path	023
Target WRS Row	032
Nadir Off Nadir	NADIR
Full or Partial Scene	FULL
Data Category	NOMINAL
Bias Parameter File Name OLI	LC8BPF20150926162207_20150926170956.01
Bias Parameter File Name TIRS	LT8BPF20150926161813_20150926171130.01
Calibration Parameter File	L8CPF20150701_20150930.02
RLUT File Name	L8RLUT20150303_20431231v11.h5
Roll Angle	-.001
Station Identifier	LGN
Day/Night	DAY
Data Type Level 1	L1T
Sensor Identifier	OLI_TIRS
Date Acquired	2015/09/26
Start Time	2015:269:16:35:13.9164380
Stop Time	2015:269:16:35:45.6864340

The background shows search results for 'Landsat Surface Reflectance - L8' with four thumbnails. A map of the region is visible on the right side of the interface.



Similar functionality available for MODIS scenes as Landsat, e.g., MODIS footprint overlay.

LPCS Land Product Characterization System

USGS Home Contact USGS Search USGS

Page Expires In 1:59:45

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov RSS Feedback Help

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
LPCS - MODIS MOD09GQ

Displaying 1 - 100 of 100

- 1 Entity ID: MOD09GQ.A2015273.h11v04.005
Coordinates: 45.0739, -93.2312
Acquisition Date: 30-SEP-15
- 2 Entity ID: MOD09GQ.A2015273.h11v05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 30-SEP-15
- 3 Entity ID: MOD09GQ.A2015272.h11v04.005
Coordinates: 45.0739, -93.2312
Acquisition Date: 29-SEP-15
- 4 Entity ID: MOD09GQ.A2015272.h11v05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 29-SEP-15
- 5 Entity ID: MOD09GQ.A2015271.h11v04.005
Coordinates: 45.1124, -93.5218
Acquisition Date: 28-SEP-15

View Item Basket »

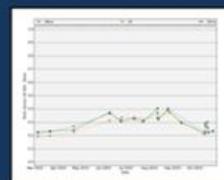
Search Criteria Summary (Show) Clear Criteria

Map Satellite (55.2262, -97.1234) Options Overlays

United States

Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics | 200 km Terms of Use Report a map error

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Similar functionality available for MODIS scenes as Landsat, e.g., MODIS browse image overlay.

LPCS **USGS**
science for a changing world
Land Product Characterization System

USGS Home
Contact USGS
Search USGS

Land Product Characterization System (LPCS) Page Expires In 1:59:02 C

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov RSS Feedback Help

Search Criteria Data Sets Additional Criteria Results

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
LPCS - MODIS MOD09GQ

« First » Previous 1 Next » Last »

Displaying 1 - 100 of 100

- 1 Entity ID: MOD09GQ.A2015273.h11v04.005
Coordinates: 45.0739, -93.2312
Acquisition Date: 30-SEP-15
- 2 Entity ID: MOD09GQ.A2015273.h11v05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 30-SEP-15
- 3 Entity ID: MOD09GQ.A2015272.h11v04.005
Coordinates: 45.0739, -93.2312
Acquisition Date: 29-SEP-15
- 4 Entity ID: MOD09GQ.A2015272.h11v05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 29-SEP-15
- 5 Entity ID: MOD09GQ.A2015271.h11v04.005
Coordinates: 45.1124, -93.5218
Acquisition Date: 28-SEP-15

View Item Basket »

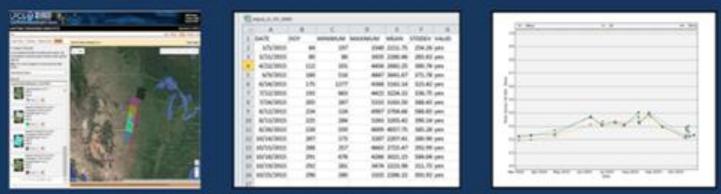
Search Criteria Summary (Show)

Map Satellite (54.5692, -102.2211) Options Overlays

United States

Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics | 200 km Terms of Use Report a map error

The up-to-date Google map is not for purchase or for download; it is to be used as a guide for reference and search purposes only.



Similar functionality available for MODIS scenes as Landsat, e.g., MODIS meta data and browse image.

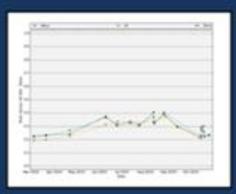
The screenshot displays the Land Product Characterization System (LPCS) interface. At the top, it features the USGS logo and the text "science for a changing world". The main header reads "Land Product Characterization System (LPCS)". Navigation options include "Home", "Save Criteria", "Load Favorite", and "Manage Criteria". A search bar is present with "Search Criteria" and "Data Sets" tabs. A "Search Criteria Summary" window is open, showing a satellite image of a landscape with a river and fields. Below the image is a table of metadata:

Data Set Attribute	Attribute Value
Local Granule ID	MOD09GQ.A2015273.h11v04.005.2015275063243.hdf
Entity ID	MOD09GQ.A2015273.h11v04.005
Acquisition Start Date	2015/09/30
Acquisition End Date	2015/09/30
Horizontal Tile Number	11
Vertical Tile	4

The background interface shows search results for "LPCS - MODIS MOD09GQ" with a list of five data sets. Each result includes an image thumbnail, Entity ID, Coordinates, and Acquisition Date. A "View Item Basket" button is visible at the bottom left. The map area shows a satellite view of a region in the eastern United States, with state names like NEW YORK, PENNSYLVANIA, MARYLAND, WEST VIRGINIA, VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA, KENTUCKY, TENNESSEE, ARKANSAS, MISSISSIPPI, OKLAHOMA, and NEW MEXICO visible. A Google logo and "Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics" are also present.



DATE	BIOMASS	BIOMASS_CHANGE	BIOMASS_CHANGE_RATE	BIOMASS_CHANGE_RATE_RATE
2015-09-30	100	0	0	0
2015-10-01	100	0	0	0
2015-10-02	100	0	0	0
2015-10-03	100	0	0	0
2015-10-04	100	0	0	0
2015-10-05	100	0	0	0
2015-10-06	100	0	0	0
2015-10-07	100	0	0	0
2015-10-08	100	0	0	0
2015-10-09	100	0	0	0
2015-10-10	100	0	0	0
2015-10-11	100	0	0	0
2015-10-12	100	0	0	0
2015-10-13	100	0	0	0
2015-10-14	100	0	0	0
2015-10-15	100	0	0	0
2015-10-16	100	0	0	0
2015-10-17	100	0	0	0
2015-10-18	100	0	0	0
2015-10-19	100	0	0	0
2015-10-20	100	0	0	0
2015-10-21	100	0	0	0
2015-10-22	100	0	0	0
2015-10-23	100	0	0	0
2015-10-24	100	0	0	0
2015-10-25	100	0	0	0
2015-10-26	100	0	0	0
2015-10-27	100	0	0	0
2015-10-28	100	0	0	0
2015-10-29	100	0	0	0
2015-10-30	100	0	0	0
2015-10-31	100	0	0	0



Several browse images can be compared by selection of Compare Browse icon for each image to be compared.

LPCS **USGS**
science for a changing world
Land Product Characterization System

USGS Home
Contact USGS
Search USGS

Land Product Characterization System (LPCS) Page Expires In 1:57:16

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov RSS Feedback Help

Search Criteria Data Sets Additional Criteria Results

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
LPCS - MODIS MOD09GQ

8		Entity ID:MOD09GQ.A2015270.h11v05.005 Coordinates:35.0523, -79.9239 Acquisition Date:27-SEP-15	
9		Entity ID:MOD09GQ.A2015269.h11v04.005 Coordinates:45.1124, -93.5218 Acquisition Date:26-SEP-15	
10		Entity ID:MOD09GQ.A2015269.h11v05.005 Coordinates:35.0523, -79.9239 Acquisition Date:26-SEP-15	
11		Entity ID:MOD09GQ.A2015268.h11v04.005 Coordinates:45.1124, -93.5218 Acquisition Date:25-SEP-15	
12		Entity ID:MOD09GQ.A2015268.h11v05.005 Coordinates:35.0523, -79.9239 Acquisition Date:25-SEP-15	

View Item Basket

Search Criteria Summary (Show)

Map Satellite (54.6710, -106.5277) Options Overlays

SKATCHEWAN ONTARIO MONTANA SOUTH DAKOTA WYOMING NEBRASKA NEBRASKA MISSOURI KANSAS MISSOURI KENTUCKY WEST VIRGINIA MARYLAND PENNSYLVANIA VIRGINIA NORTH CAROLINA SOUTH CAROLINA MISSISSIPPI ARKANSAS MISSISSIPPI

United States

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Entity ID	Coordinates	Acquisition Date
MOD09GQ.A2015270.h11v05.005	35.0523, -79.9239	27-SEP-15
MOD09GQ.A2015269.h11v04.005	45.1124, -93.5218	26-SEP-15
MOD09GQ.A2015269.h11v05.005	35.0523, -79.9239	26-SEP-15
MOD09GQ.A2015268.h11v04.005	45.1124, -93.5218	25-SEP-15
MOD09GQ.A2015268.h11v05.005	35.0523, -79.9239	25-SEP-15



Then within Show Controls window

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Land Product Characterization System (LPCS) USGS Home
Contact USGS
Search USGS

Page Expires In 1:57:16

Home Save Criteria Load Favorite Manage Criteria Item Basket (0) kgallo@usgs.gov Feedback Help

Search Criteria Data Sets Additional Criteria **Results**

4. Search Results

If you selected more than one data set to search, use the dropdown to see the search results for each specific data set.

Show Result Controls

Data Set
LPCS - MODIS MOD09GQ

- Entity ID: MOD09GQ.A2015270.H11V05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 27-SEP-15
- Entity ID: MOD09GQ.A2015269.H11V04.005
Coordinates: 45.1124, -93.5218
Acquisition Date: 26-SEP-15
- Entity ID: MOD09GQ.A2015269.H11V05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 26-SEP-15
- Entity ID: MOD09GQ.A2015268.H11V04.005
Coordinates: 45.1124, -93.5218
Acquisition Date: 25-SEP-15
- Entity ID: MOD09GQ.A2015268.H11V05.005
Coordinates: 35.0523, -79.9239
Acquisition Date: 25-SEP-15
- Entity ID: MOD09GQ.A2015267.H11V04.005

[View Item Basket >](#)

Search Criteria Summary (Show)

Map Satellite (54.6710, -106.5277) Options Overlays

United States

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Entity ID	Coordinates	Acquisition Date
MOD09GQ.A2015270.H11V05.005	35.0523, -79.9239	27-SEP-15
MOD09GQ.A2015269.H11V04.005	45.1124, -93.5218	26-SEP-15
MOD09GQ.A2015269.H11V05.005	35.0523, -79.9239	26-SEP-15
MOD09GQ.A2015268.H11V04.005	45.1124, -93.5218	25-SEP-15
MOD09GQ.A2015268.H11V05.005	35.0523, -79.9239	25-SEP-15
MOD09GQ.A2015267.H11V04.005		



Select the Compare Browse, "All Scenes" option.

The screenshot displays the USGS Land Product Characterization System (LPCS) interface. At the top, the header includes the LPCS logo, the USGS logo with the tagline "science for a changing world", and navigation links for "USGS Home", "Contact USGS", and "Search USGS". Below the header, the page title is "Land Product Characterization System (LPCS)" and the page expires in 1:59:45. The main navigation bar contains "Home", "Save Criteria", "Load Favorite", and "Manage Criteria".

The central area is titled "4. Search Results" and includes a sub-header "Search Criteria Summary (Show)". Below this, there are tabs for "Search Criteria", "Data Sets", "Additional Criteria", and "Results". A blue arrow points from the text above to the "Compare Browse" dropdown menu, which is currently set to "All Scenes". Other controls include "Map Overlay" and "Compare" buttons, and a "Browse Opacity" slider set to 100%.

The "Data Set" section is titled "Landsat Surface Reflectance - L8 OLI/TIRS" and shows a list of search results. The first result is highlighted, showing a thumbnail image and the following details: Entity ID: LC80230322015269LGN00, Coordinates: 40.33282, -88.78004, Acquisition Date: 26-SEP-15, Path: 23, Row: 32. Below the thumbnail are icons for map, satellite, and other actions.

The right side of the interface features a large satellite map of the United States with a red location pin in the central region. The map includes a search bar with coordinates (73.8194, -149.7827) and options for "Map" and "Satellite". The map is powered by Google and includes a scale bar for 1000 km.



This figure shows a screenshot of a data table, likely from the LPCS system. The table contains search results with the following columns: Entity ID, Coordinates, Acquisition Date, Path, and Row. The data is as follows:

Entity ID	Coordinates	Acquisition Date	Path	Row
LC80230322015269LGN00	40.33282, -88.78004	26-SEP-15	23	32
LC80230322015262LGN00	40.33283, -87.23428	19-SEP-15	22	32
LC80230322015253LGN00	40.33275, -88.77062	10-SEP-15	23	32



The browse images selected will be displayed for comparisons.

LPCS Land Product Characterization System

USGS Home Contact USGS Search USGS

Home Item Basket (0) kgallo@usgs.gov RSS Feedback Help

LPCS - MODIS MOD09GQ

MOD09GQ.A2015269.h11v04.005

Entity ID: MOD09GQ.A2015269.h11v04.005
Coordinates: 45.1124, -93.5218
Acquisition Date: 26-SEP-15

Overlays

Standard Browse Remove from Map

Landsat Surface Reflectance - L8 OLI/TIRS

LC80230322015269LGN00

Entity ID: LC80230322015269LGN00
Coordinates: 40.33282, -88.78004
Acquisition Date: 26-SEP-15
Path: 23
Row: 32

Overlays

LandsatLook "Natural Color" Preview Image Remove from Map

LandsatLook "Thermal" Preview Image Add to Map

Map Satellite Map Controls & Options

MONTANA SOUTH DAKOTA WYOMING NEBRASKA MISSOURI KENTUCKY TENNESSEE WEST VIRGINIA VIRGINIA NORTH CAROLINA MARYLAND PENNSYLVANIA NEW YORK ONTARIO

Google Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics Terms of Use Report a map error

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Landsat Surface Reflectance - L8 OLI/TIRS - LC80230322015269LGN00 - LandsatLook Opacity 100%

LPCS - MODIS MOD09GQ - 2193256569 - Standard Browse Opacity 100%

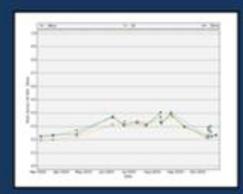
Accessibility FOIA Privacy Policies and Notices Google Maps API Disclaimer

U.S. Department of the Interior U.S. Geological Survey
URL: <http://lpcsexplorer.cr.usgs.gov>
Page Contact Information: custserv@usgs.gov

USA.gov



Path	Row	Band	Value						
121	1	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	2	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	3	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	4	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	5	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	6	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	7	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	8	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	9	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	10	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	11	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	12	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	13	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	14	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	15	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	16	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	17	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	18	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	19	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	20	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	21	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	22	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	23	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	24	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	25	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	26	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	27	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	28	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	29	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00
121	30	MODIS	213.00	213.00	213.00	213.00	213.00	213.00	213.00



Select *Order Scene* icon to place individual scenes in the order basket. After selection of all scenes of interest (from all sensors), select “Item Basket” to continue to advanced processing menu.

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Land Product Characterization System (LPCS) Page Expires In 1:53:07

Home Save Criteria Load Favorite Manage Criteria **Item Basket (7)** kgallo@usgs.gov RSS Feedback Help

Search Criteria Data Sets Additional Criteria **Results**

4. Search Results

If you selected more than one dataset to search, use the dropdown to see the search results for each specific data set.

Hide Result Controls

- Show All Footprints From Current Page
- Show All Browse From Current Page
- Add All Results From Current Page to Order

Compare Browse: Map Overlay All Scenes **Compare**

Browse Opacity: 100%

Data Set

Landsat Surface Reflectance - L8 OLI/TIRS

« First Previous 1 Next Last »

Displaying 1 - 23 of 23

1 Entity ID:LC80230322015269LGN00
Coordinates:40.33282,-88.78004
Acquisition Date:13-SEP-15
Path:23
Row:32

2 Entity ID:LC80220322015262LGN00
Coordinates:40.33283,-87.23428
Acquisition Date:19-SEP-15
Path:22
Row:32

3 Entity ID:LC80230322015253LGN00
Coordinates:40.33275,-88.77062
Acquisition Date:10-SEP-15
Path:23
Row:32

Search Criteria Summary (Show) **Clear Criteria**

Map Satellite (43.2123, -87.5951) Options Overlays

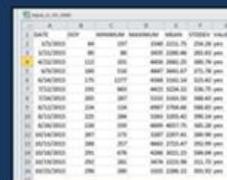
INDIANA
Carmel
Indianapolis
Cincinnati
Louisville
Frankfort
Lexington

MISSOURI
St. Louis
Columbia
Jefferson City
Chesterfield
Rolla
Lebanon

KENTUCKY
Evansville
Owensboro
Elizabethtown

Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics | 50 km Terms of Use Report a map error

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Recommended scenes to select for additional processing and comparisons.

DOY	Calendar Date
118	28 April 2015
157	6 June
205	24 July
214	2 August
237	25 August
269	26 September

Landsat

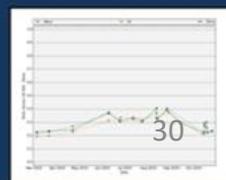
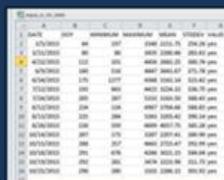
LC80220322015118LGN00
LC80230322015157LGN00
LC80230322015205LGN00
LC80220322015214LGN00
LC80230322015237LGN00
LC80230322015269LGN00

MODIS

MOD09GQ.A2015118.h11v04.005.2015120061007
MOD09GQ.A2015157.h11v04.005.2015162191826
MOD09GQ.A2015205.h11v04.005.2015207070150
MOD09GQ.A2015214.h11v04.005.2015216091444
MOD09GQ.A2015237.h11v04.005.2015239071123
MOD09GQ.A2015269.h11v04.005.2015271070032

LPCS

Land Product Characterization
System



Scenes ordered can be reviewed by selecting toggle “v” next to data set name.

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Land Product Characterization System (LPCS)

Home Item Basket (13) kgallo@usgs.gov Feedback Help

Please Note: This page will expire at 3:07:54 PM CST. Once expired, you will be logged out and your order may be lost.

To complete your order click on the "Select Processing Options" button at the bottom of the page. You will be taken to the ESPA website to complete your order.

Order Clear All

- ^ Landsat Surface Reflectance - L8 OLI/TIRS (7)
 - ⊗ Remove All Scenes
 - L80230322015269LGN00**

Entity ID: LC80230322015269LGN00
Coordinates: 40.33282, -88.78004
Acquisition Date: 26-SEP-15
Path: 23
Row: 32

Product: **L8 OLI/TIRS LAND SURFACE REFLECTANCE ON-DEMAND** ▾
Options: None
Output Media: DWNLD
- LC80220322015246LGN00

Entity ID: LC80220322015246LGN00
Coordinates: 40.33288, -87.21638
Acquisition Date: 03-SEP-15
Path: 22
Row: 32

Product: **L8 OLI/TIRS LAND SURFACE REFLECTANCE ON-DEMAND** ▾
Options: None
Output Media: DWNLD

- LC80230322015237LGN00

Entity ID: LC80230322015237LGN00
Coordinates: 40.33283, -88.76608
Acquisition Date: 25-AUG-15
Path: 23
Row: 32

Product: **L8 OLI/TIRS LAND SURFACE REFLECTANCE ON-DEMAND** ▾
Options: None
Output Media: DWNLD

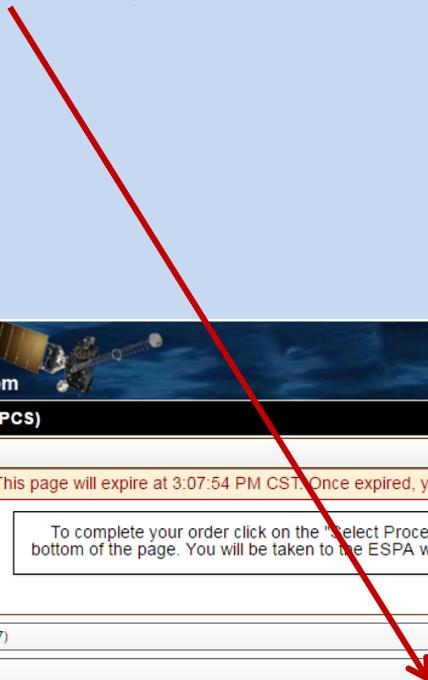
- LC80220322015214LGN00



DATE	TIME	WATER							
20150926	00	00	00	00	00	00	00	00	00
20150926	01	00	00	00	00	00	00	00	00
20150926	02	00	00	00	00	00	00	00	00
20150926	03	00	00	00	00	00	00	00	00
20150926	04	00	00	00	00	00	00	00	00
20150926	05	00	00	00	00	00	00	00	00
20150926	06	00	00	00	00	00	00	00	00
20150926	07	00	00	00	00	00	00	00	00
20150926	08	00	00	00	00	00	00	00	00
20150926	09	00	00	00	00	00	00	00	00
20150926	10	00	00	00	00	00	00	00	00
20150926	11	00	00	00	00	00	00	00	00
20150926	12	00	00	00	00	00	00	00	00
20150926	13	00	00	00	00	00	00	00	00
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20150926	15	00	00	00	00	00	00	00	00
20150926	16	00	00	00	00	00	00	00	00
20150926	17	00	00	00	00	00	00	00	00
20150926	18	00	00	00	00	00	00	00	00
20150926	19	00	00	00	00	00	00	00	00
20150926	20	00	00	00	00	00	00	00	00
20150926	21	00	00	00	00	00	00	00	00
20150926	22	00	00	00	00	00	00	00	00
20150926	23	00	00	00	00	00	00	00	00



When finished reviewing ordered scenes, select the "Select Processing Options" to proceed to Custom Processing form.



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Land Product Characterization System (LPCS)

Home Item Basket (13) kgallo@usgs.gov RSS Feedback Help

Please Note: This page will expire at 3:07:54 PM CST. Once expired, you will be logged out and your order may be lost.

To complete your order click on the "Select Processing Options" button at the bottom of the page. You will be taken to the ESPA website to complete your order.

Order [Clear All](#)

- ▼ Landsat Surface Reflectance - L8 OLI/TIRS (7)
- ▼ LPCS - MODIS MOD09GQ (6)

Clear Item Basket **Select Processing Options**

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U.S. Department of the Interior U.S. Geological Survey
URL: <https://lpcsexplorer.cr.usgs.gov>
Page Contact Information: lpcs@usgs.gov
Page Last Modified: 08/02/2016
Server: edcx158
Zend Version: 1.12.13
Build Number: 10

USA.gov



DATE	SCENE	MODIS	LANDSAT	SPOT	VIIRS	VIIRS	VIIRS
20160801	001	001	001	001	001	001	001
20160801	002	002	002	002	002	002	002
20160801	003	003	003	003	003	003	003
20160801	004	004	004	004	004	004	004
20160801	005	005	005	005	005	005	005
20160801	006	006	006	006	006	006	006
20160801	007	007	007	007	007	007	007
20160801	008	008	008	008	008	008	008
20160801	009	009	009	009	009	009	009
20160801	010	010	010	010	010	010	010



Custom Processing form: Ordered scenes will be displayed in the "Scene List".



Add Input Products ([Show Available Products](#))

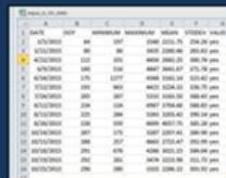
Scene List

```
LC80230322015269LGN00, LC80220322015246LGN00, LC80230322015237LGN00, LC80220322015214LGN00, LC80230322015205LGN00, LC80230322015157LGN00, LC80220322015118LGN00, MOD09GQ.A2015269.h11v04.005.2015271070032, MOD09GQ.A2015237.h11v04.005.201523907123, MOD09GQ.A2015214.h11v04.005.2015216091444, MOD09GQ.A2015205.h11v04.005.2015207070150, MOD09GQ.A2015157.h11v04.005.2015162191826, MOD09GQ.A2015118.h11v04.005.2015120061007
```

Select Product Contents

Source Products

- [Input Products](#)
- [Input Product Metadata](#)



Select NDVI within the available *Spectral Indices*.

Additional Processing (Landsat Only)

Climate Data Records

Surface Reflectance

Other Landsat Level-2 Products

Top of Atmosphere Reflectance

Brightness Temperature

CFMask

Spectral Indices

NDVI

EVI

SAVI

MSAVI

NDMI

NBR

NBR2

Customize Outputs

Customization Options

Output Format GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Modify Image Extents

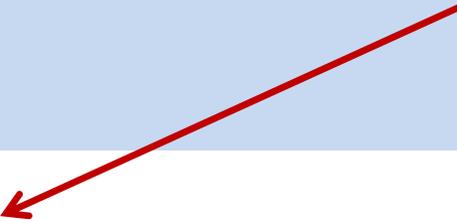
Pixel Resizing



DATE	TIME	MINIMUM	MAXIMUM	MEAN	STDDEV	VALUE
20120801	00	0.00	0.00	0.00	0.00	0.00
20120801	01	0.00	0.00	0.00	0.00	0.00
20120801	02	0.00	0.00	0.00	0.00	0.00
20120801	03	0.00	0.00	0.00	0.00	0.00
20120801	04	0.00	0.00	0.00	0.00	0.00
20120801	05	0.00	0.00	0.00	0.00	0.00
20120801	06	0.00	0.00	0.00	0.00	0.00
20120801	07	0.00	0.00	0.00	0.00	0.00
20120801	08	0.00	0.00	0.00	0.00	0.00
20120801	09	0.00	0.00	0.00	0.00	0.00
20120801	10	0.00	0.00	0.00	0.00	0.00
20120801	11	0.00	0.00	0.00	0.00	0.00
20120801	12	0.00	0.00	0.00	0.00	0.00
20120801	13	0.00	0.00	0.00	0.00	0.00
20120801	14	0.00	0.00	0.00	0.00	0.00
20120801	15	0.00	0.00	0.00	0.00	0.00
20120801	16	0.00	0.00	0.00	0.00	0.00
20120801	17	0.00	0.00	0.00	0.00	0.00
20120801	18	0.00	0.00	0.00	0.00	0.00
20120801	19	0.00	0.00	0.00	0.00	0.00
20120801	20	0.00	0.00	0.00	0.00	0.00
20120801	21	0.00	0.00	0.00	0.00	0.00
20120801	22	0.00	0.00	0.00	0.00	0.00
20120801	23	0.00	0.00	0.00	0.00	0.00
20120801	24	0.00	0.00	0.00	0.00	0.00
20120801	25	0.00	0.00	0.00	0.00	0.00
20120801	26	0.00	0.00	0.00	0.00	0.00
20120801	27	0.00	0.00	0.00	0.00	0.00
20120801	28	0.00	0.00	0.00	0.00	0.00
20120801	29	0.00	0.00	0.00	0.00	0.00
20120801	30	0.00	0.00	0.00	0.00	0.00



Define output products from **Customization Options** available;
Output format, Reprojection, Image Extents, and pixel size.

Customize Outputs 

Customization Options

Output Format GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Modify Image Extents

Pixel Resizing

Intercomparison & Statistics

Plot Output Product Statistics

Add Order Description

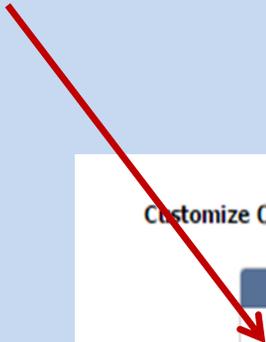
Order Description (optional)



DATE	TIME	MINIMUM	MAXIMUM	MEAN	STDDEV	VALUE
2012/01/01	00	100	1000	200.00	200.00	100.00
2012/01/01	01	100	1000	200.00	200.00	100.00
2012/01/01	02	100	1000	200.00	200.00	100.00
2012/01/01	03	100	1000	200.00	200.00	100.00
2012/01/01	04	100	1000	200.00	200.00	100.00
2012/01/01	05	100	1000	200.00	200.00	100.00
2012/01/01	06	100	1000	200.00	200.00	100.00
2012/01/01	07	100	1000	200.00	200.00	100.00
2012/01/01	08	100	1000	200.00	200.00	100.00
2012/01/01	09	100	1000	200.00	200.00	100.00
2012/01/01	10	100	1000	200.00	200.00	100.00
2012/01/01	11	100	1000	200.00	200.00	100.00
2012/01/01	12	100	1000	200.00	200.00	100.00
2012/01/01	13	100	1000	200.00	200.00	100.00
2012/01/01	14	100	1000	200.00	200.00	100.00
2012/01/01	15	100	1000	200.00	200.00	100.00
2012/01/01	16	100	1000	200.00	200.00	100.00
2012/01/01	17	100	1000	200.00	200.00	100.00
2012/01/01	18	100	1000	200.00	200.00	100.00
2012/01/01	19	100	1000	200.00	200.00	100.00
2012/01/01	20	100	1000	200.00	200.00	100.00
2012/01/01	21	100	1000	200.00	200.00	100.00
2012/01/01	22	100	1000	200.00	200.00	100.00
2012/01/01	23	100	1000	200.00	200.00	100.00



Define output products from Customization Options available;
Output format.



Customize Outputs

Customization Options

Output Format GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Modify Image Extents

Pixel Resizing

Intercomparison & Statistics

Plot Output Product Statistics

Add Order Description

Order Description (optional)

Submit



ID	NAME	AREA	PERCENT	PERCENT	PERCENT	PERCENT
1	10000000	1000	1000	1000	1000	1000
2	20000000	2000	2000	2000	2000	2000
3	30000000	3000	3000	3000	3000	3000
4	40000000	4000	4000	4000	4000	4000
5	50000000	5000	5000	5000	5000	5000
6	60000000	6000	6000	6000	6000	6000
7	70000000	7000	7000	7000	7000	7000
8	80000000	8000	8000	8000	8000	8000
9	90000000	9000	9000	9000	9000	9000
10	100000000	10000	10000	10000	10000	10000



Define output products from Customization Options available;
Projection.

Customize Outputs

Customization Options

Output Format GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Projection:

- Albers Equal Area
- Universal Transverse Mercator
- Geographic
- Sinusoidal
- Polar Stereographic
- 1st Standard Parallel
- 2nd Standard Parallel
- False Easting
- False Northing

Datum

Modify Image Extents

Pixel Resizing

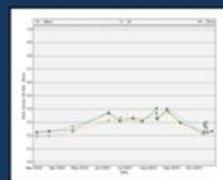
Resample Method:

Intercomparison & Statistics

Plot Output Product Statistics



DATE	DAY	MINIMUM	MAXIMUM	MEAN	STDDEV
20120101	01	100	1000	100.0	100.0
20120102	02	100	1000	100.0	100.0
20120103	03	100	1000	100.0	100.0
20120104	04	100	1000	100.0	100.0
20120105	05	100	1000	100.0	100.0
20120106	06	100	1000	100.0	100.0
20120107	07	100	1000	100.0	100.0
20120108	08	100	1000	100.0	100.0
20120109	09	100	1000	100.0	100.0
20120110	10	100	1000	100.0	100.0
20120111	11	100	1000	100.0	100.0
20120112	12	100	1000	100.0	100.0
20120113	13	100	1000	100.0	100.0
20120114	14	100	1000	100.0	100.0
20120115	15	100	1000	100.0	100.0
20120116	16	100	1000	100.0	100.0
20120117	17	100	1000	100.0	100.0
20120118	18	100	1000	100.0	100.0
20120119	19	100	1000	100.0	100.0
20120120	20	100	1000	100.0	100.0
20120121	21	100	1000	100.0	100.0
20120122	22	100	1000	100.0	100.0
20120123	23	100	1000	100.0	100.0
20120124	24	100	1000	100.0	100.0
20120125	25	100	1000	100.0	100.0
20120126	26	100	1000	100.0	100.0
20120127	27	100	1000	100.0	100.0
20120128	28	100	1000	100.0	100.0
20120129	29	100	1000	100.0	100.0
20120130	30	100	1000	100.0	100.0
20120131	31	100	1000	100.0	100.0



Define output products from Customization Options available; **Pixel size.**

Customize Outputs

Customization Options

Output Format: GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Projection: ▾

Latitude of Origin

Central Meridian

1st Standard Parallel

2nd Standard Parallel

False Easting

False Northing

▾ Datum

Modify Image Extents

Decimal Degrees Meters

Upper left X coordinate

Upper left Y coordinate

Lower right X coordinate

Lower right Y coordinate

Pixel Resizing

Meters

Resample Method: ▾

Intercomparison & Statistics

Plot Output Product Statistics



DATE	DAY	MINIMUM	MAXIMUM	MEAN	STDDEV	VALUE
4/20/2010	80	1007	4044	2025.75	208.20	pxs
5/12/2010	80	80	3893	2002.00	205.00	pxs
6/23/2010	102	80	4889	2460.25	268.75	pxs
8/10/2010	180	110	4867	2322.47	275.38	pxs
8/19/2010	175	1277	4888	2462.24	273.40	pxs
11/10/2010	280	160	4862	2328.00	278.75	pxs
11/24/2010	285	207	5202	2424.50	268.40	pxs
4/12/2011	228	108	4867	2328.00	268.40	pxs
6/12/2011	225	284	5883	2851.42	390.00	pxs
8/16/2011	240	270	4869	2421.75	268.20	pxs
8/25/2011	262	173	5207	2473.40	268.00	pxs
8/17/2011	260	217	4862	2322.47	275.00	pxs
8/27/2011	270	478	4248	2163.00	248.00	pxs
8/19/2011	270	381	3878	2224.00	251.75	pxs
8/12/2011	260	380	3282	2282.50	260.00	pxs



Define output products from Customization Options available;
Resampling method.

Customize Outputs

Customization Options

Output Format GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Projection:

Latitude of Origin

Central Meridian

1st Standard Parallel

2nd Standard Parallel

False Easting

False Northing

Datum

Modify Image Extents

Decimal Degrees Meters

Upper left X coordinate

Upper left Y coordinate

Lower right X coordinate

Lower right Y coordinate

Pixel Resizing

Meters

Resample Method:

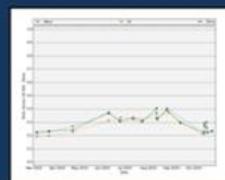
- Nearest Neighbor
- Bilinear Interpolation
- Cubic Convolution

Intercomparison & Statistics

Plot Output Product Statistics



DATE	DAY	MINIMUM	MAXIMUM	MEAN	STDDEV	VALUE
4/20/2010	86	3567	8888	5225.75	258.25	min
5/2/2010	86	3601	8888	5262.25	265.25	min
6/4/2010	122	3551	8888	5202.25	268.75	min
6/16/2010	160	3562	8888	5224.25	275.25	min
6/28/2010	176	3277	8888	5262.25	325.45	min
7/12/2010	202	3622	8888	5224.25	328.75	min
7/26/2010	209	3561	8888	5262.25	368.45	min
8/9/2010	224	3524	8888	5262.25	368.45	min
8/23/2010	229	3584	8888	5262.25	368.45	min
9/6/2010	239	3579	8888	5262.25	368.45	min
9/20/2010	265	3571	8888	5262.25	368.45	min
10/4/2010	288	3571	8888	5262.25	368.45	min
10/18/2010	295	3571	8888	5262.25	368.45	min
11/1/2010	321	3574	8888	5262.25	368.45	min
11/15/2010	328	3574	8888	5262.25	368.45	min



Example Customization Options; GeoTiff format, Albers Equal Area Projection, output Image Extents (defined area is approximately a 50 x 50 km image size) , 250 m pixel size, and Nearest Neighbor resampling.

Customize Outputs

Customization Options

Output Format GeoTiff ENVI HDF-EOS2 NetCDF

Reproject Products

Projection:

Latitude of Origin

Central Meridian

1st Standard Parallel

2nd Standard Parallel

False Easting

False Northing

Datum

Modify Image Extents

Decimal Degrees Meters

Upper left X coordinate

Upper left Y coordinate

Lower right X coordinate

Lower right Y coordinate

Pixel Resizing

Meters

Resample Method:

Intercomparison & Statistics

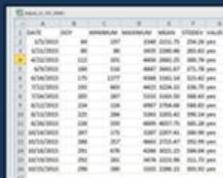
Plot Output Product Statistics

Add Order Description

Order Description (optional)

~50 x 50 km image size

250 m pixel size



Selection of output statistics and charts is recommended.

Customize Outputs

Customization Options

Output Format: GeoTiff ENV1 HDF-EOS2 NetCDF

Reproject Products

Projection: Albers Equal Area

40.0 Latitude of Origin

-90.0 Central Meridian

45.0 1st Standard Parallel

35.0 2nd Standard Parallel

0.0 False Easting

0.0 False Northing

WGS 84 Datum

Modify Image Extents

Decimal Degrees Meters

-88.666 Upper left X coordinate

40.277 Upper left Y coordinate

-88.08 Lower right X coordinate

39.827 Lower right Y coordinate

Pixel Resizing

250 Meters

Resample Method: Nearest Neighbor

Intercomparison & Statistics

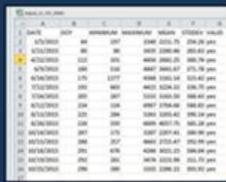
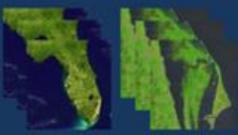
Plot Output Product Statistics

Add Order Description

Order Description (optional)

50 x 50 km
image size

250 m pixel size



After login to system, files will be available for download as gzip files.

Products 'onorder': 191 | Product Backlog: 236008

NOTICES

NOTE: Surface Reflectance processing cannot be applied to data acquired during the dates listed on the Caveats and Constraints section on http://landsat.usgs.gov/CDR_LSR.php, due to unavailable auxiliary input data and/or missing thermal data required to create Surface Reflectance data products.

ATTENTION USERS: If your email address has recently changed, please update your profile in the USGS EROS Registration System (ERS) to retain timely delivery of data: <https://ers.cr.usgs.gov>. Thank you.

Requested: 14

Completed: 14

Open: 0

Waiting on data: 0

Order: kevin.p.gallo@noaa.gov-11172016-064051-787

Date Ordered: 2016-11-17T06:40:51.787500

Status: complete

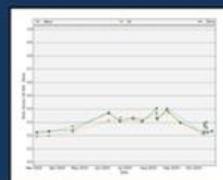
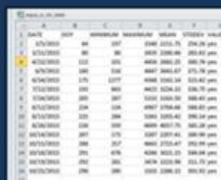
Date Completed: 2016-11-17T12:47:43.181774

Requested Processing: Reproject to geographic, resize pixels to 0.0002695 dd, image extents set to ulx:-88.3956 uly:40.0744 lrx:-88.3506 lry:40.0294, Output Format is geotiff

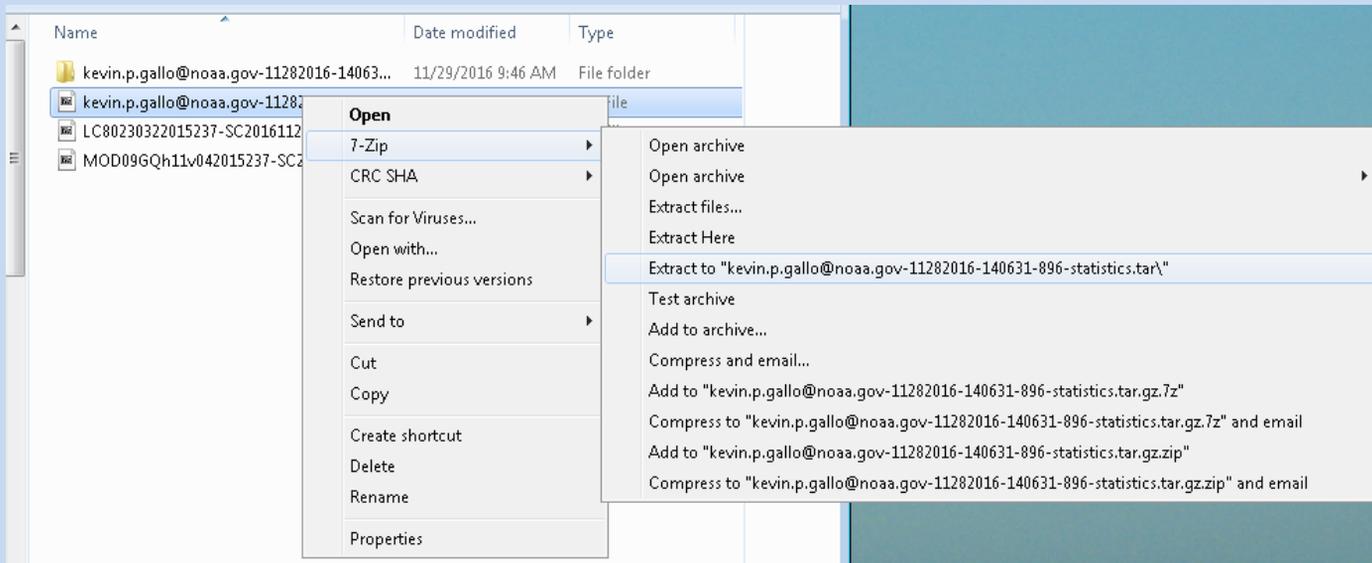
Products by sensor: olitrs8: original input products, surface reflectance, sr_ndvi, plots and statistics, mod09gq: original input products, plots and statistics,

The ESPA Bulk Downloader is available on [GitHub](#)

Product	Status	Product URL	Chksum URL	Note
Plotting & Statistics	complete	Download	Checksum	"
LC80220322015214LGN00	complete	Download	Checksum	"
LC80230322015237LGN00	complete	Download	Checksum	"
LC80230322015205LGN00	complete	Download	Checksum	"
LC80220322015246LGN00	complete	Download	Checksum	"
LC80220322015118LGN00	complete	Download	Checksum	"
LC80230322015269LGN00	complete	Download	Checksum	"
LC80230322015157LGN00	complete	Download	Checksum	"
MOD09GQ.A2015118.h11v04.005.2015120061007	complete	Download	Checksum	"
MOD09GQ.A2015269.h11v04.005.2015271070032	complete	Download	Checksum	"
MOD09GQ.A2015205.h11v04.005.2015207070150	complete	Download	Checksum	"
MOD09GQ.A2015214.h11v04.005.2015216091444	complete	Download	Checksum	"
MOD09GQ.A2015237.h11v04.005.2015239071123	complete	Download	Checksum	"
MOD09GQ.A2015157.h11v04.005.2015162191826	complete	Download	Checksum	"



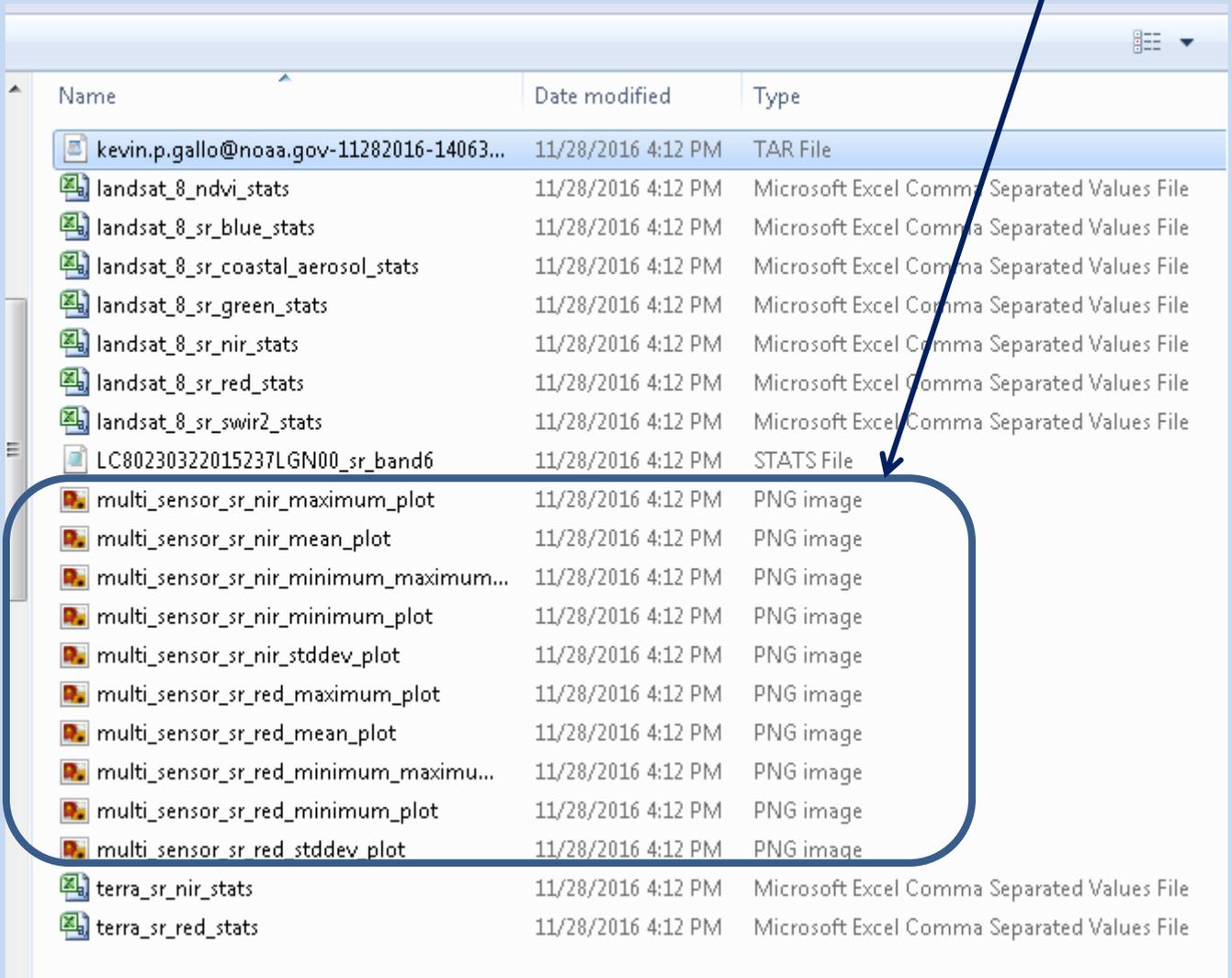
Unzip and extract files.



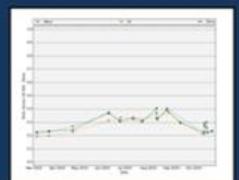
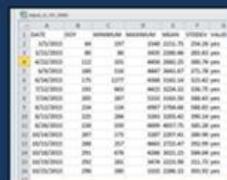
DATE	TIME
20161129	09:46
20161129	10:00
20161129	10:15
20161129	10:30
20161129	10:45
20161129	11:00
20161129	11:15
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20161129	11:45
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20161129	22:45
20161129	23:00
20161129	23:15
20161129	23:30
20161129	23:45
20161129	00:00



Statistics file includes figures (plots) of individual and multi-sensor values for comparison.

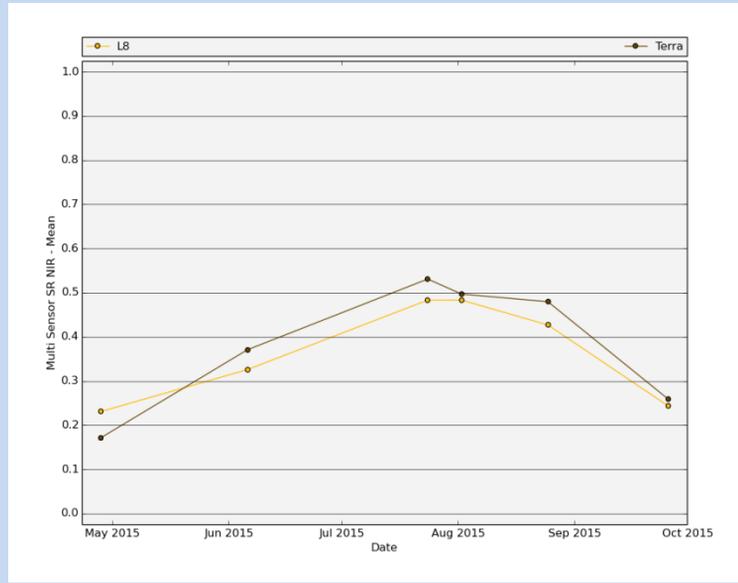


Name	Date modified	Type
kevin.p.gallo@noaa.gov-11282016-14063...	11/28/2016 4:12 PM	TAR File
landsat_8_ndvi_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
landsat_8_sr_blue_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
landsat_8_sr_coastal_aerosol_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
landsat_8_sr_green_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
landsat_8_sr_nir_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
landsat_8_sr_red_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
landsat_8_sr_swir2_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
LC80230322015237LGN00_sr_band6	11/28/2016 4:12 PM	STATS File
multi_sensor_sr_nir_maximum_plot	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_nir_mean_plot	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_nir_minimum_maximum...	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_nir_minimum_plot	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_nir_stddev_plot	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_red_maximum_plot	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_red_mean_plot	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_red_minimum_maximu...	11/28/2016 4:12 PM	PNG image
multi_sensor_sr_red_minimum_plot	11/28/2016 4:12 PM	PNG image
multi_sensor sr red stddev plot	11/28/2016 4:12 PM	PNG image
terra_sr_nir_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File
terra_sr_red_stats	11/28/2016 4:12 PM	Microsoft Excel Comma Separated Values File



Output includes charts and statistical data that are based on entire image size (50 x 50 km) selected.

DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV
4/28/2015	118	5	7646	2307.896	617.5091
6/6/2015	157	780	7190	3258.631	595.1171
7/24/2015	205	0	9868	4832.317	1251.121
8/2/2015	214	89	7287	4833.278	866.1694
8/25/2015	237	0	9801	4267.921	1145.069
9/26/2015	269	0	7332	2433.96	813.2986



Landsat

MODIS



Additional detailed analysis is possible through the availability of all images ordered.

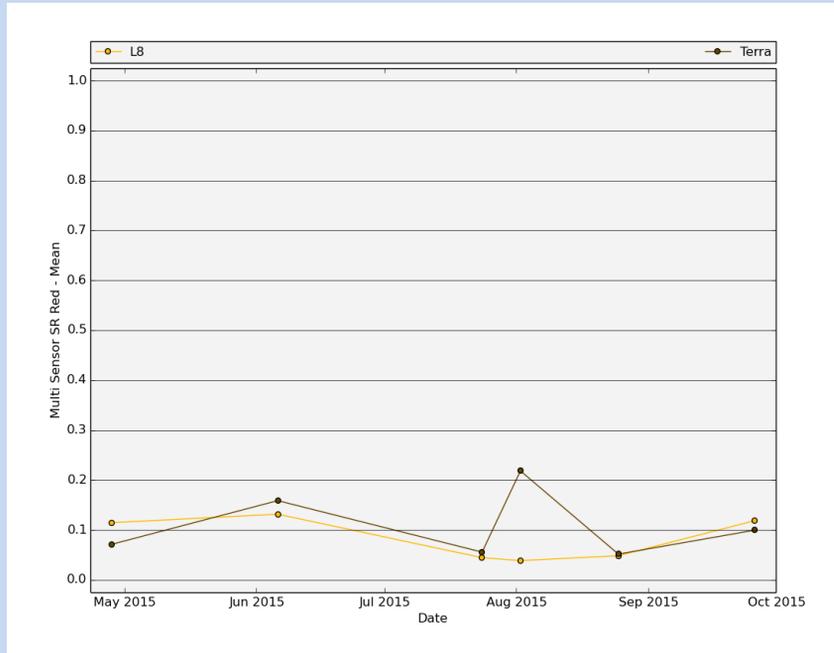


DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV
4/28/2015	118	5	7646	2307.896	617.5091
6/6/2015	157	780	7190	3258.631	595.1171
7/24/2015	205	0	9868	4832.317	1251.121
8/2/2015	214	89	7287	4833.278	866.1694
8/25/2015	237	0	9801	4267.921	1145.069
9/26/2015	269	0	7332	2433.96	813.2986

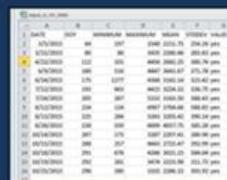
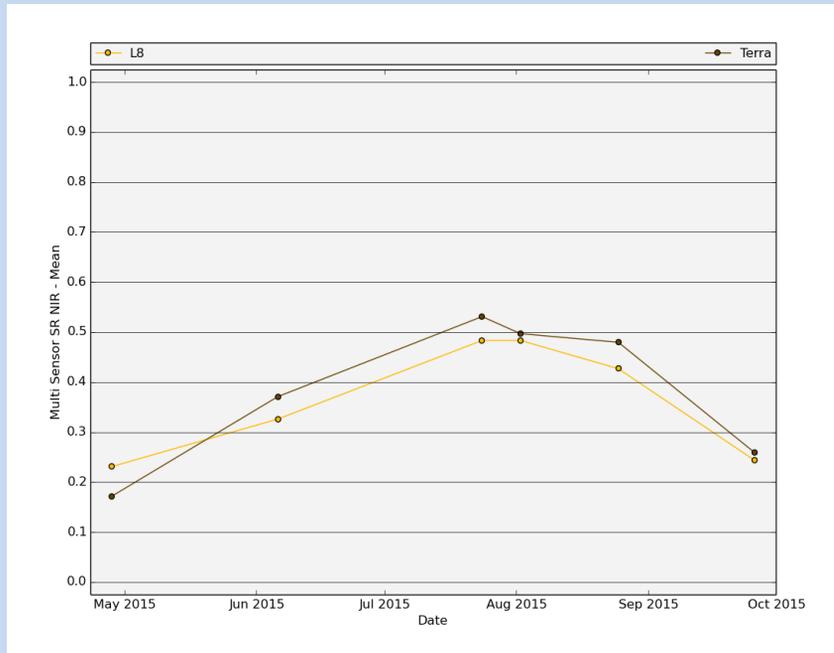


Mean values for Landsat (L8) and MODIS (Terra) red (top) and near-IR (bottom) band Surface Reflectance (SR) data . Mean values computed for sample area of approximately 50 x 50 km, 250 m pixel resolution, as selected in Customization Options.

red



Near-IR



Mean values for Landsat and MODIS near-IR (top) and red (bottom) band Surface Reflectance (SR) data within area (50 x 50 km) selected within the Customization Options for Image Extents (250 m pixel size).

Landsat

DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV
4/28/2015	118	5	7646	2307.896	617.5091
6/6/2015	157	780	7190	3258.631	595.1171
7/24/2015	205	0	9868	4832.317	1251.121
8/2/2015	214	89	7287	4833.278	866.1694
8/25/2015	237	0	9801	4267.921	1145.069
9/26/2015	269	0	7332	2433.96	813.2986

MODIS

DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV
4/28/2015	118	957	3956	1714.612	385.9079
6/6/2015	157	2301	5342	3707.392	382.4974
7/24/2015	205	1864	7589	5309.799	693.0055
8/2/2015	214	2265	8764	4968.467	1059.351
8/25/2015	237	2057	6715	4794.906	711.3864
9/26/2015	269	1097	5392	2588.981	563.4716

DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV
4/28/2015	118	127	7518	1144.286	361.7855
6/6/2015	157	199	5964	1314.538	534.0732
7/24/2015	205	0	8389	443.3277	730.1088
8/2/2015	214	77	5594	384.9749	316.6969
8/25/2015	237	0	8897	482.7726	633.5293
9/26/2015	269	0	6857	1184.091	561.0291

DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV
4/28/2015	118	295	1954	711.3986	128.9739
6/6/2015	157	324	4092	1586.059	458.9578
7/24/2015	205	1	4726	554.9559	459.6827
8/2/2015	214	35	8568	2182.521	1850.715
8/25/2015	237	18	3595	515.4232	270.8727
9/26/2015	269	10	3923	994.1347	383.1156

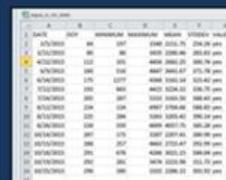
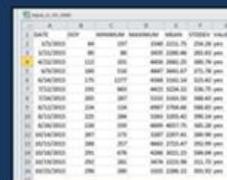
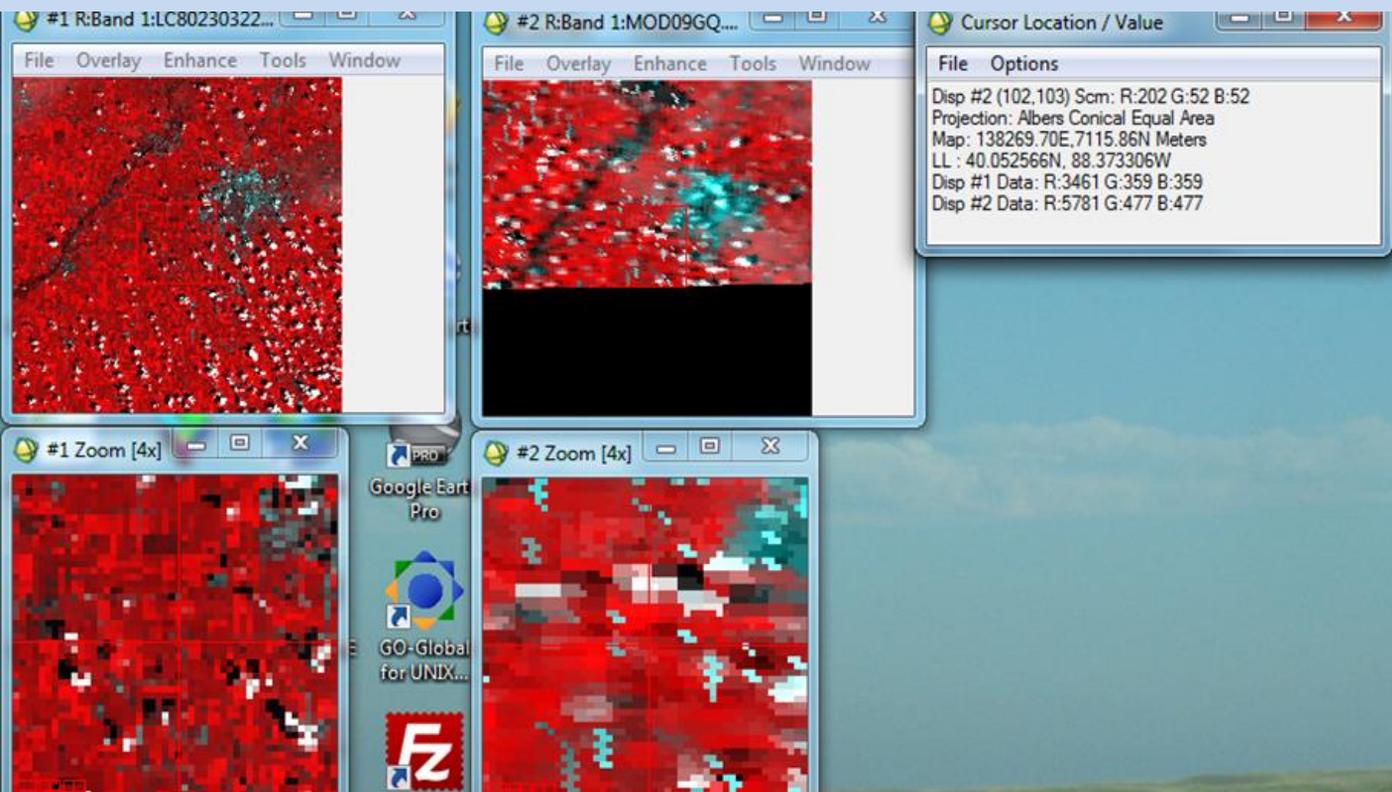


Image files includes data of individual bands and additional products (Landsat only) ordered for further analysis and comparisons.

Name	Date modified	Type	Size
stats	11/28/2016 4:05 PM	File folder	
LC80230322015237LGN00	11/28/2016 4:05 PM	XML Document	23 KB
LC80230322015237LGN00_band1	11/28/2016 4:05 PM	TIFF image	58 KB
LC80230322015237LGN00_band2	11/28/2016 4:05 PM	TIFF image	58 KB
LC80230322015237LGN00_band3	11/28/2016 4:05 PM	TIFF image	58 KB
LC80230322015237LGN00_band4	11/28/2016 4:05 PM	TIFF image	58 KB
LC80230322015237LGN00_band5	11/28/2016 4:05 PM	TIFF image	58 KB
LC80230322015237LGN00_band6	11/28/2016 4:05 PM	TIFF image	58 KB
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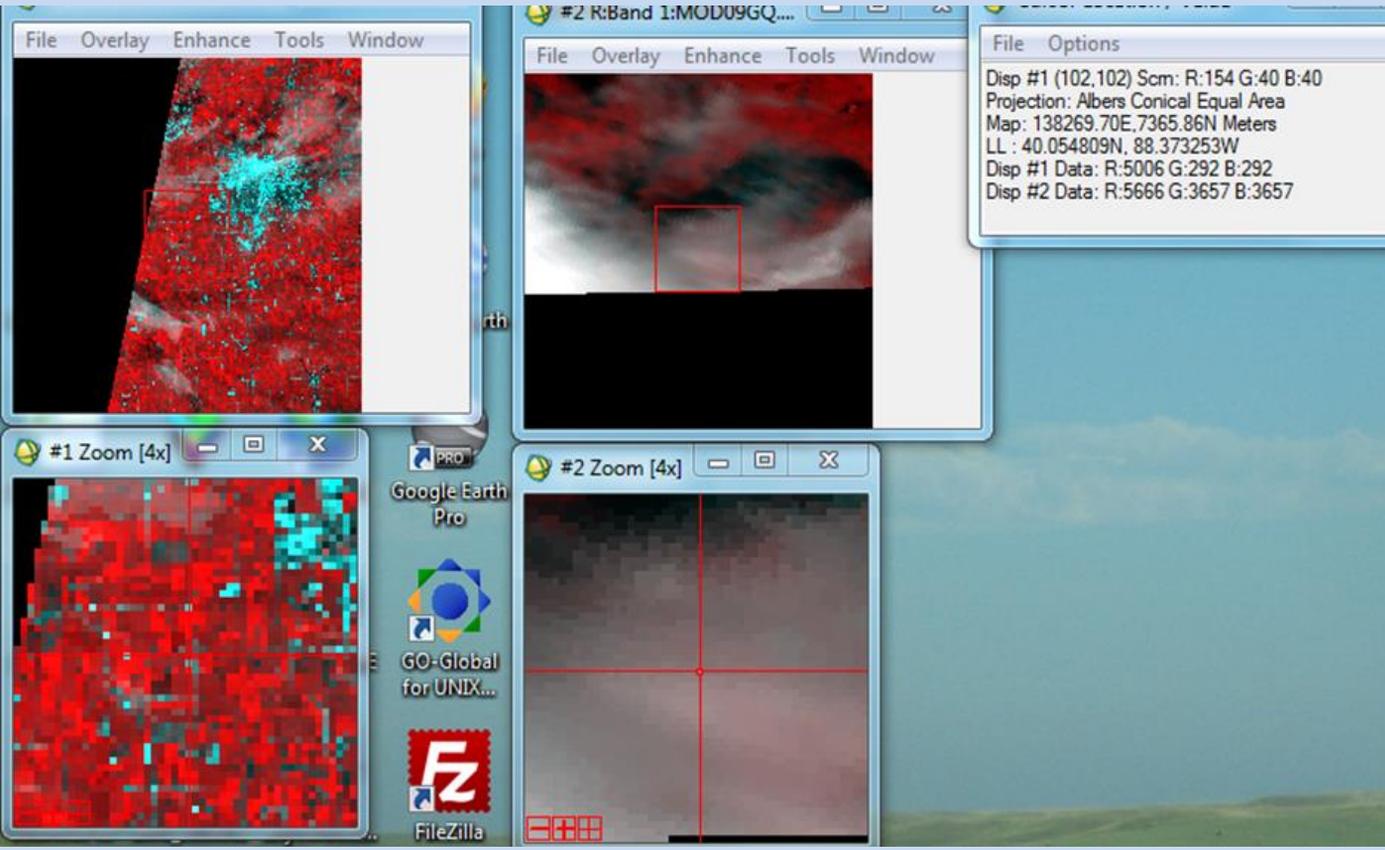


Near-IR and Red band Surface Reflectance values for Landsat (left) and MODIS (right). Location of cursor, is centered on Bondville, IL SURFRAD station: 24 July 2015. Sample area is 50 x 50 km and data resolution is 250m.

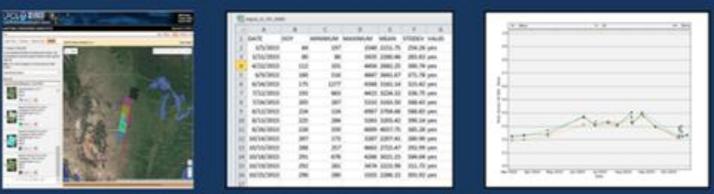


	Red	Near-IR	NDVI
Landsat	0.02	0.34	0.89
MODIS	0.02	0.48	0.92

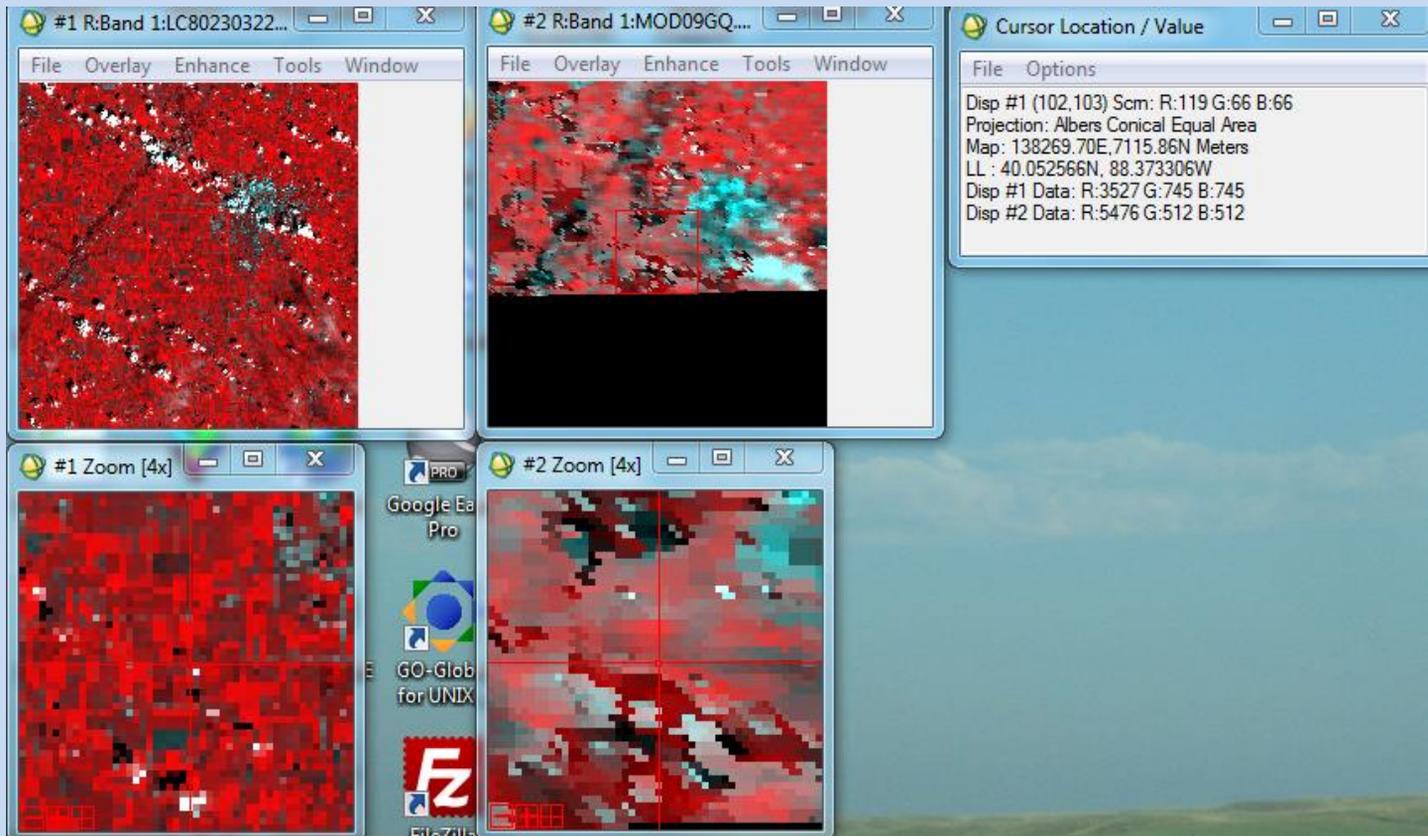
Near-IR and Red band Surface Reflectance values for Landsat (left) and MODIS (right). Location of cursor is centered on Bondville, IL SURFRAD station: 2 August 2015. Sample area is 50 x 50 km and data resolution is 250m.



	Red	Near-IR	NDVI
Landsat	0.03	0.50	0.53
MODIS	0.36	0.57	0.22



Near-IR and Red band Surface Reflectance values for Landsat (left) and MODIS (right). Location of cursor is centered on Bondville, IL SURFRAD station: 25 August 2015. Sample area is 3.8 x 5 km and data resolution is 30m.



	Red	Near-IR	NDVI
Landsat	0.07	0.35	0.67
MODIS	0.05	0.55	0.83



Y	X	Value
1	102	119
2	103	66
3	104	66
4	105	66
5	106	66
6	107	66
7	108	66
8	109	66
9	110	66
10	111	66
11	112	66
12	113	66
13	114	66
14	115	66
15	116	66
16	117	66
17	118	66
18	119	66
19	120	66
20	121	66
21	122	66
22	123	66
23	124	66
24	125	66
25	126	66
26	127	66
27	128	66
28	129	66
29	130	66
30	131	66
31	132	66
32	133	66
33	134	66
34	135	66
35	136	66
36	137	66
37	138	66
38	139	66
39	140	66
40	141	66
41	142	66
42	143	66
43	144	66
44	145	66
45	146	66
46	147	66
47	148	66
48	149	66
49	150	66
50	151	66
51	152	66
52	153	66
53	154	66
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58	159	66
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69	170	66
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82	183	66
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86	187	66
87	188	66
88	189	66
89	190	66
90	191	66
91	192	66
92	193	66
93	194	66
94	195	66
95	196	66
96	197	66
97	198	66
98	199	66
99	200	66



Future Enhancements for LPCS.

An external review of LPCS, prior to public release of the system, resulted in the following recommendations that are planned for implementation as resources permit.

Automatic mosaicking of adjacent images, within a user requested area, that are acquired on same date (within same Landsat path or adjacent MODIS tile).

Automatic cloud screening applied to tabular data files and cloud indicators available as separate band for output images (as currently available for Landsat products).

Allow users to enter size of desired output image extent, e.g., 50 x 50 km, and utilize LPCS software to compute the associated lat/lon values that would provide the image corner extents.

Include within tables provided: 1) the number of samples used in computation of statistics, 2) include both raw (currently provided) and scaled (e.g., to reflectance) values, and 3) compute NDVI and include in tables when visible and near-IR values are available.



DATE	PATH	ROW	MIN	MAX	MEAN	STD	MIN	MAX	MEAN	STD
20130101	183	100	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	102	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	106	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	107	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	108	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	109	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20130101	183	110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



