NOAA/USGS Land Product Characterization System

A web-based system designed to facilitate characterization and validation of *higher-level scientific data products* including land products from VIIRS, MODIS, Landsat, Sentinel-2 and -3 and GOES-R ABI.

Identify area of interest

Select all products within area of interest

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Select specific scenes of interest

The LPCS includes:
- data inventory
- access and
- analysis functions

that will permit selection of data to be easily identified, retrieved, co-registered, and compared statistically through a single interface.
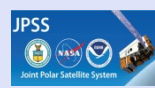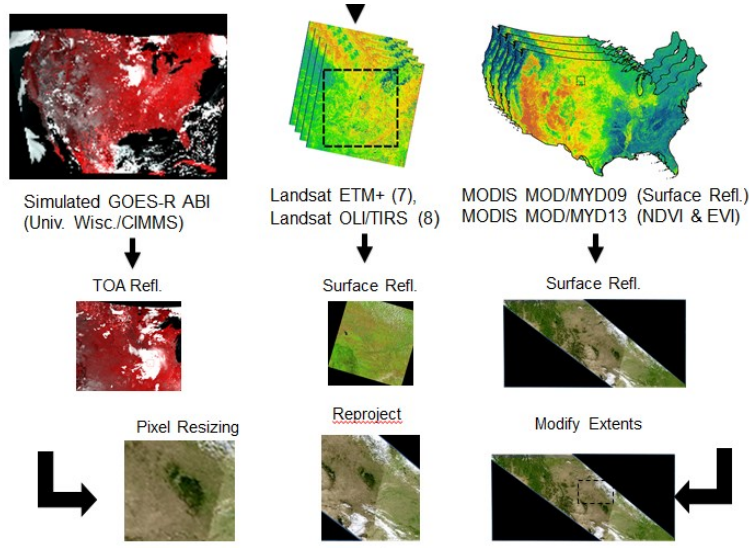

Customize output products

Output includes *summarized tables and charts* for selected area of interest and *geographically registered and resampled image products* for additional analysis by system users.
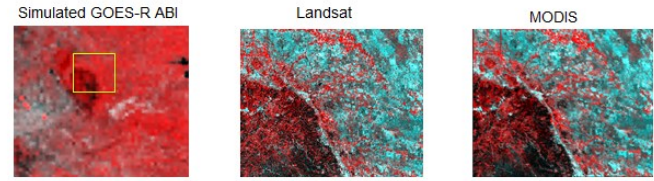
Sensor data/products from MODIS and Landsat are currently included within the LPCS. Additional land data/products from VIIRS, Sentinel-2, and GOES-R will be integrated within the LPCS as they become available as *higher-level scientific data products* .

LPCS — Land Product Characterization System
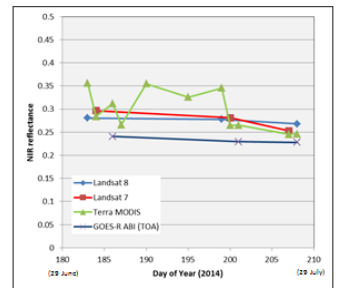
Input Products in Native Projections

Simulated GOES-R ABI (Univ. Wisc./CIMMS)

Landsat ETM+ (7), Landsat OLI/TIRS (8)

MODIS MOD/MYD09 (Surface Refl.) MODIS MOD/MYD13 (NDVI & EVI)

TOA Refl. → Surface Refl. → Surface Refl.

Pixel Resizing → Reproject → Modify Extents

Output Products

Simulated GOES-R ABI | Landsat | MODIS

Tables and charts of individual bands or indices

	A	B	C	D	E	F	G
1	DATE	DOY	MINIMUM	MAXIMUM	MEAN	STDDEV	VALID
2	7/2/2014	183	854	6850	3562.327	693.2124	yes
3	7/3/2014	184	349	8094	2836.911	495.3851	yes
4	7/5/2014	186	290	6780	3122.295	493.9331	yes
5	7/6/2014	187	308	4667	2653.052	575.2196	yes
6	7/9/2014	190	815	5553	3545.954	658.4303	yes
7	7/14/2014	195	191	7778	3254.757	636.479	yes
8	7/18/2014	199	1253	5621	3455.974	681.7747	yes
9	7/19/2014	200	343	5165	2643.97	393.5894	yes
10	7/20/2014	201	404	8447	2648.748	691.372	yes
11	7/26/2014	207	309	5266	2452.574	376.6008	yes
12	7/27/2014	208	457	4713	2462.386	465.7057	yes
13							

Mean, minimum, maximum, standard deviation

Near-IR time series inter-comparisons