

## Downloading Landsat Data

### Earth Explorer

The USGS is the source for downloading Landsat data. Below are instructions for downloading the following products:

**Landsat 5—1984 to 2013**

**Landsat 7—1999 to 2003 (2003 to Present has SLC Problems-Mostly bad images)**

**Landsat 8—2013 to Present**

**Landsat 9—2022 to Present**

To get started go to <https://earthexplorer.usgs.gov/>

**Register & Login** - This will allow you to create Bulk Downloads, Standing Requests and Save Search Criteria to reuse later as well as order large amounts of data at one time. Trying to log in later may "Reset" all your selections back nothing.

The downloading process consists of several steps represented by the four tabs on the top left corner of the map window along with instructions for bulk downloading data

- **Search Criteria**
- **Data Sets**
- **Additional Criteria**
- **Results**
- **Downloading & Bulk Downloading**

The screenshot displays the USGS Earth Explorer web application. The browser address bar shows 'earthexplorer.usgs.gov'. The page features a top navigation bar with the USGS logo and 'EarthExplorer' title. Below this, a sidebar on the left contains search criteria options: 'Geocoder', 'KML/Shapefile Upload', 'Select a Geocoding Method' (set to 'Feature (GNIS)'), 'Search Limits' (100 records), 'Feature Name' (with a wildcard), 'State' (set to 'All'), 'Feature Type' (set to 'All'), 'Polygon' (selected), 'Circle', 'Predefined Area', 'Degree/Minute/Second', 'Decimal', 'No coordinates selected', 'Date Range', 'Cloud Cover', 'Result Options', 'Search from' (mm/dd/yyyy), 'Search to' (mm/dd/yyyy), 'Search months' (all), 'Data Sets', 'Additional Criteria', and 'Results'. The main map area shows a satellite view of the United States with state boundaries and major cities labeled. A coordinate box in the top right of the map displays '40° 25' 39" N, 68° 44' 30" W'. A disclaimer at the bottom of the map area states: 'The provided maps are not for purchase or for download; they are to be used as a guide for reference and search purposes only; they are not owned or managed by the USGS.'

## Downloading Landsat Data

### Search Criteria

Search Criteria involves selecting a search area or feature and a timeframe.

For area selection - Skip to Polygon

**Select a Geocoding Method** - Don't change from default

**State** - Choose the State.

**Feature Type** - Search by feature like a zip code

**Shapefile** - Upload a shapefile boundary such a field, section, or township

**KML** - Upload a KML boundary (can be exported out of ADMS)

**Polygon** - Create a defined area by clicking on the map to create a boundary. Scroll around on the map, find the location you are looking for. Left click will drop Pins to define area.

**Date Range** - Choose a beginning date and an ending date

**Search Months** - Choose specific month or months

**Cloud Cover** - Select a percentage of acceptable cloud cover.

**Result Options** - Choose how many images will show in the "Results" tab without having to click the "Next" button

Suggest clicking "Data Sets" Button

## Downloading Landsat Data

### Data Sets

There are MANY datasets available on this site.

Please NOTE: ADMS will only work with this specific data.

Go down to "Landsat"

- Landsat Collection 2 Level-2
- ADMS will work with Landsat 4-5/7/8/9 data

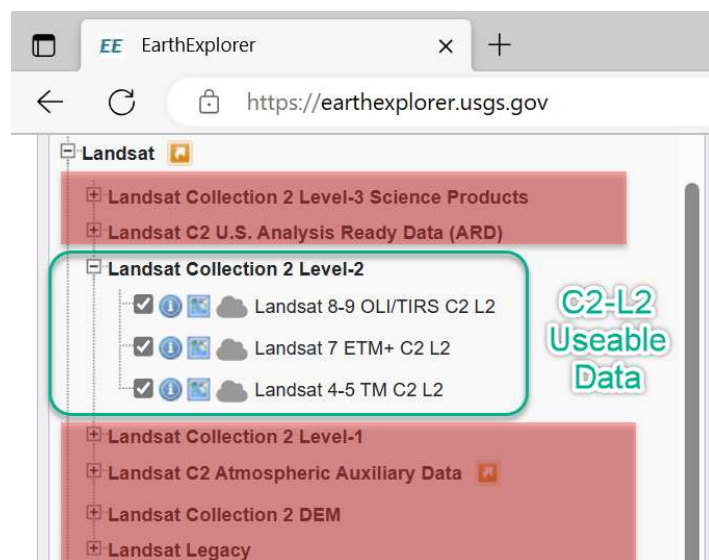
Example we will be downloading Landsat 4-5 / 7 / & 8-9 imagery for an area in Minnesota, USA.

NOTE: Working with one Landsat dataset / collection at time may be easier than checking on all 3.

Regardless of whether or not you are downloading one data set or several, the process is the same.

### Landsat Data Sets

#### ***MUST Use: Collection 2—Level 2***



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:

EO-1

Global Fiducials

HCMM

ISERV

Land Cover

Landsat

Landsat Collection 2 Level-3 Science Products

Landsat C2 U.S. Analysis Ready Data (ARD)

Landsat Collection 2 Level-2

☒ Landsat 8-9 OLI/TIRS C2 L2
 ☒ Landsat 7 ETM+ C2 L2
 ☒ Landsat 4-5 TM C2 L2

Landsat Collection 2 Level-1

Landsat C2 Atmospheric Auxiliary Data

Landsat Collection 2 DEM

Landsat Legacy

LCMAP

NASA LPDAAC Collections

Radar

UAS

Vegetation Monitoring

ISRO Resourcesat

Clear All Selected

Additional Criteria »

Results »



## Downloading Landsat Data

### Additional Criteria

Allows user to set additional criteria for each dataset.

We are not doing any explanation here. Click the "i" button to learn about each item.

### Results



There are several options that can be applied to each product.

**Footprint** - Shows a highlighted outline of the product's extents

**Browse Overlay** - Shows a visual rendition of the selected product

**Compare Browse** - Compare products you've selected using this button

**Metadata** - Provides specific details about the acquisition and processing of the product

**Download** - Allows to download the specific product directly - NOW one at a time.

**Bulk Download** - Add the specific product to a bulk download (add to basket)

**Order Scene** - Used to purchase a product that is not cost free

**Exclude** - Exclude product from the results

**Select all the products you want to download by selecting the Bulk Download button for each individual scene or tile.**

Click the "View Item Basket"

## Downloading Landsat Data

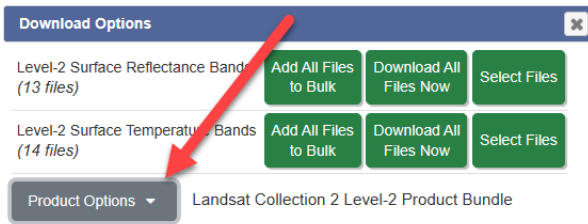
### Click the “Download” button

(for a Single Image download)

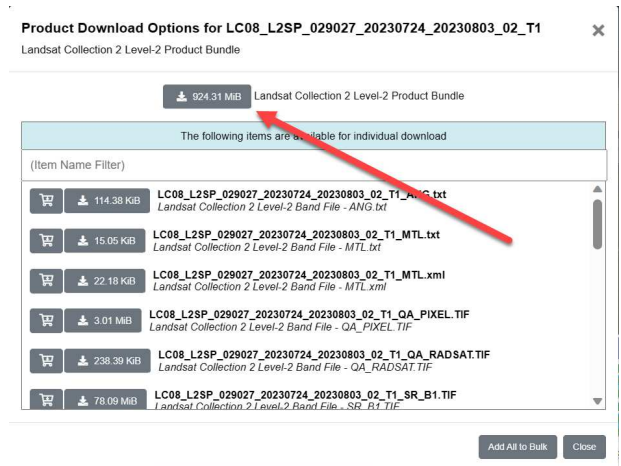


Using this button will download 1 image at a time.

The Download Options window will open—Click “Product Options”



Next the “Product Download Options” will open—>  
Click the Button at the Top Center.

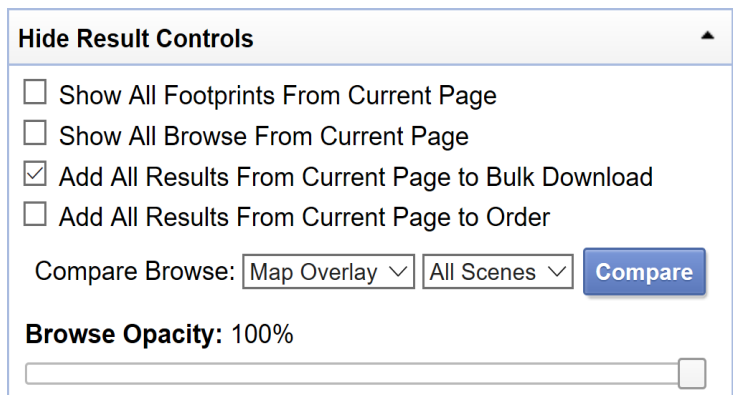


## Creating a Bulk Download 1

### Result Controls

MUST BE LOGGED IN FOR BULK DOWNLOAD:

At the top of the Results Tab are several functions. Most commonly used are the Add All Results from Current Page to Bulk Download or to Order. Rather than selecting each individual product that you want to download, you can select them all at once to save time and unselect the ones you don't want in the next step.



## Creating Bulk Download 2

Look through the list of images, if the Bulk Download is highlighted “Lime Green” they will be added to the Bulk Download order. If not highlighted, the image will not be downloaded via Bulk Download.



Once happy with selections, click the “View Item Basket” at the bottom of the image list.

[View Item Basket »](#)

## Downloading Landsat Data

### View Item Basket—Bulk Downloads

Under Bulk Download—click the up/down arrow and expand the list of images to download.

*NOTE: pending selection / selected list (mid picture).*

Click on each image name to download. Scroll top to bottom and check each. At this time, have not found a faster way.

*Example: ADMS needs the Landsat-932.73 MiB in the first box. Downloads as a .TAR file. This is a type of ZIP file that has all the bands of data in one file.*

When done there will be 0 pending selection

Click Submit Product Selection  
—Wait a moment—

An Order number should show up where the selection list was.

Click Bulk Download Application at the top

**Bulk Download Application**

**Bulk Download Orders**

Order ID	Date Entered	Files Remaining	Size Remaining	Last Updated
20230824_123446	2023-08-24T17:34:46.729Z	8	7.56 GB	8/24/2023, 12:36:00 PM

Click **Open Order** (indicated by a red arrow).

**Order Details:**

Order ID	Date Entered	Files Remaining	Size Remaining	Status
LC08_L2SP_030027_20230723_20230802_02_T1	2023-08-24T17:34:46.729Z	8	7.56 GB	Available
LC08_L2SP_030027_20230731_20230805_02_T1	2023-08-24T17:34:46.729Z	8	7.56 GB	Available

Click **Begin Download** (indicated by a red arrow).

**Order ID:** 20230824\_123446

**Destination Folder Name:** LS-BulkDownloadTest

**Size Remaining:** 7.56 GB

**Errors:** 0

### Bulk Download - 8 Items

The [Bulk Download Web Application](#) is an easy-to-use tool for downloading large quantities of satellite imagery and geospatial data. This application allows users to download groups of submitted scenes that can be automatically executed without the user physically downloading each scene. This web interface replaced the legacy Java version of the application.

☒ Landsat 8-9 OLI/TIRS C2 L2 (6 pending selection, 2 selected)

Displaying 1 - 8 of 8

Results Per Page: 100

< First < Previous 1 Next > Last >

LC08\_L2SP\_030027\_20230528\_20230606\_02\_T1

Landsat Collection 2 Level-2 Product Bundle (932.73 MiB)

LC08\_L2SP\_030027\_20230613\_20230622\_02\_T1

Landsat Collection 2 Level-2 Product Bundle (946.73 MiB)

LC08\_L2SP\_030027\_20230629\_20230711\_02\_T1

Landsat Collection 2 Level-2 Product Bundle (993.11 MiB)

LC09\_L2SP\_030027\_20230808\_20230810\_02\_T1

Landsat Collection 2 Level-2 Product Bundle (948.22 MiB)

< First < Previous 1 Next > Last >

Bulk Download Order Name - Optional

Submit Product Selections

### Bulk Download - 8 Items

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### Order '20230824\_123446' Submitted

An order confirmation email has been sent to the e-mail address associated with this ERS account. You may also view the status of your order at any time by using the [Bulk Order Tracking](#) page.

Click the Blue—Open Order button. It will ask where to save files. Choose or make a folder.  
- Note the overall download size—Ex 7.56 GB

A new view will open with all the data to be downloaded. At the bottom of the window click Begin Download.

Landsat files are on your PC for ADMS Processing.