

# **LP DAAC2Disk Download Manager**

**(HTTP/FTP Download Tool)**

## **User Guide**

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*Land Processes DAAC*

*USGS Earth Resources Observation and Science (EROS) Center*

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## DAAC2Disk Tool

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The Daac2Disk tool can be downloaded and run as a command line executable. The interface is available at [https://lpdaac.usgs.gov/data\\_access/daac2disk](https://lpdaac.usgs.gov/data_access/daac2disk).

The interface searches for data products (datasets) that are held in the NASA Common Metadata Repository (CMR). The [CMR](#) is a high-performance, high-quality, continuously evolving metadata system that catalogs all data and service metadata records for the *Earth Observing System Data and Information System* (EOSDIS) and will be the authoritative management system for all EOSDIS metadata. For listings of LP DAAC specific data products (datasets), please visit <https://lpdaac.usgs.gov/products>.

**Note:** The DAAC2Disk tool has been mainly tested with LP DAAC data; little testing has been done with data from other DAACs. Products from other DAACs may or may not be downloadable using DAAC2Disk.

There are three search options offered through the interface: searching CMR with the “Select via Parameters,” “Select from a File,” and “Select from an Order URL.”

## Command Line Daac2Disk Interface

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The Daac2Disk command line utility is available for Windows, Linux/Unix, Ubuntu, CentOS 7, and Macintosh. There is a separate version for each of the Operating Systems. Each version of the script has the same options.

- Daac2Disk\_win.exe for Windows
- Daac2Disk\_mac for Macintosh
- Daac2Disk\_linux for Linux/Unix
- Daac2Disk\_ubuntu for Ubuntu
- Daac2Disk\_centos7 for CentOS 7

## Script usage

Running the script with no input will display the usage as shown in Figure 1. The following screen captures show running the Windows-based script via the command (cmd.exe) window.

**NOTE:** When entering script parameters, do not include brackets (<, >, [, or ]).

**NOTE:** Some Linux systems set the /tmp directory as "noexec" meaning no binary can be run from /tmp. The Perl package Daac2Disk\_linux normally uses /tmp to unzip and execute from. If you try to run Daac2Disk\_linux and nothing happens, set the PAR\_GLOBAL\_TMPDIR environment variable to a different directory.

in csh or tcsh:

```
setenv PAR_GLOBAL_TMPDIR <some user accessible temp dir>
```

in bash or sh:

```
export PAR_GLOBAL_TMPDIR=<some user accessible temp dir>
```

```

C:\temp\D2D>Daac2Disk_win.exe

USAGE:

Daac2Disk_win.exe --version

OR

Daac2Disk_win.exe --shortname <SHORTNAME> --versionid <VER>
  [--noscience]
  [--nometadata]
  [--browse]
  [--qa]
  [--begin <YYYY-MM-DD> --end <YYYY-MM-DD>]
  [--bbox <l1Lon l1Lat urLon urLat>] or
  [--tile <horizMin> <horizMax> <vertMin> <vertMax>]
  [--outputdir <output directory>]
  [--test]

NOTE: The versionid is not a number. It is a string and as
      such much match exactly. ie '5' is not the same as '005'

OR

Daac2Disk_win.exe --inputfile <input file name>
  [--output <output directory>]

OR

Daac2Disk_win.exe --orderurl <URL from order email>
  [--output <output directory>]

OR

Daac2Disk_win.exe --url <Single URL>
  [--output <output directory>]

NOTE: The output location defaults to the current directory.
NOTE: The Science files are downloaded by default, to turn that off, use --no
science
NOTE: The Metadata files are downloaded by default, to turn that off, use --n
ometadata

```

Figure 1. Script Usage

## Search Options

The first option listed in the usage is the search option. The user is required to enter the short name and version ID of the product of interest. Additional parameters may be entered to further filter the search results.

Figure 2 shows a search and download of MOD09A1 version 6 data that includes the science file, metadata file, and browse file. The search option also used the temporal and bounding box spatial search features.

```
C:\temp\D2D>Daac2Disk_win.exe --shortname MOD09A1 --versionid 006 --browse --begin 2018-03-30 --end 2018-04-06 --bbox -116 33 -96 45.5 --output C:\temp\Downloads

There are 18 files to download. Do you wish to continue; [y/n]? y

NASA Earthdata Username:
NASA Earthdata Password:

Downloading: https://e4ftl01.cr.usgs.gov//MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v05.006.2018098033530.hdf
Downloading: https://e4ftl01.cr.usgs.gov//MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v05.006.2018098033530.hdf.xml
Downloading: https://e4ftl01.cr.usgs.gov//WORKING/BRWS/Browse.001/2018.04.08/BROWSE.MOD09A1.A2018089.h09v05.006.2018098033530.1.jpg
```

Figure 2. Bounding Box Search Example

Figure 3 shows a search and download of MOD09A1 version 6 data. The search option also used the temporal and tile spatial search features.

```
C:\temp\D2D>Daac2Disk_win.exe --shortname MOD09A1 --versionid 006 --browse --begin 2018-03-30 --end 2018-04-06 --tile 20 22 3 4 --output C:\temp\Downloads

There are 18 files to download. Do you wish to continue; [y/n]? y

NASA Earthdata Username:
NASA Earthdata Password:

Downloading: https://e4ftl01.cr.usgs.gov//MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h21v04.006.2018098033920.hdf
Downloading: https://e4ftl01.cr.usgs.gov//MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h21v04.006.2018098033920.hdf.xml
Downloading: https://e4ftl01.cr.usgs.gov//WORKING/BRWS/Browse.001/2018.04.08/BROWSE.MOD09A1.A2018089.h21v04.006.2018098033921.1.jpg
```

Figure 3. Tile Search Example

### Input File Option

The input file used in this search option is generated using Earthdata Search. After having selected the desired data, click Download Project Data. The following figures show how to generate the input file, download.txt.

Figure 4 shows the options for Select Data Access method. Select the Direct Download and then Submit or Continue for multiple collections.

## Select Data Access Method

<input checked="" type="radio"/> <b>Direct Download</b> Download data <b>as-is</b> now from your browser or access script.	<input type="radio"/> <b>Stage for Delivery</b> Submit a request for data to be staged for delivery. You will get an email when they are ready.	<input type="radio"/> <b>Customize Product</b> Select custom service options to be performed. (e.g. subsetting, etc.)
---	--	--

Figure 4. Data Access Method

Figure 5 shows the View/Download Data Links button that will create your input file(s). Click the button for all collections listed.

- **MODIS/Terra Surface Reflectance 8-Day L3 Global 500m SIN Grid V006**
- **MISR Level 3 Component Global Albedo seasonal product in netCDF format V006**

Figure 5. Download Data Links

Figure 6 and Figure 7 show the buttons for downloading. Click the Download Links File. As a best practice, the input file should be saved as a .txt file into the same directory as the Daac2Disk.exe file. When you are using multiple collections, you will receive a separate download file for each collection. You will have to merge the files into one input file. If there are ftp URLs in your input file, group these at the top of the list.

### Collection granule links have been retrieved

Please click the button to download these links.

- [https://e4ftl01.cr.usgs.gov/MODV6\\_Cmp\\_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v05.006.2018098033530.hdf](https://e4ftl01.cr.usgs.gov/MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v05.006.2018098033530.hdf)
- [https://e4ftl01.cr.usgs.gov/MODV6\\_Cmp\\_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v04.006.2018098033715.hdf](https://e4ftl01.cr.usgs.gov/MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v04.006.2018098033715.hdf)

Figure 6. HDF Download Links File

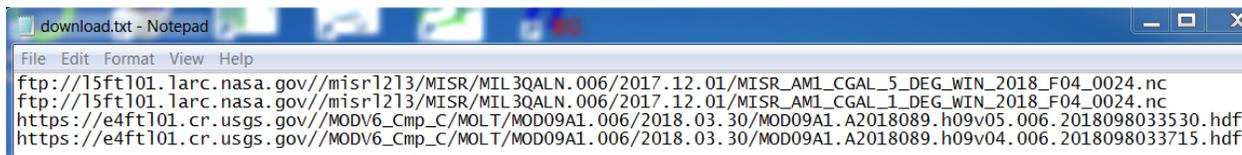
### Collection granule links have been retrieved

Please click the button to download these links.

- [ftp://15ftl01.larc.nasa.gov/misrl213/MISR/MIL3QALN.006/2017.12.01/MISR\\_AM1\\_CGAL\\_5\\_DEG\\_WIN\\_2018\\_F04\\_0024.nc](ftp://15ftl01.larc.nasa.gov/misrl213/MISR/MIL3QALN.006/2017.12.01/MISR_AM1_CGAL_5_DEG_WIN_2018_F04_0024.nc)
- [ftp://15ftl01.larc.nasa.gov/misrl213/MISR/MIL3QALN.006/2017.12.01/MISR\\_AM1\\_CGAL\\_1\\_DEG\\_WIN\\_2018\\_F04\\_0024.nc](ftp://15ftl01.larc.nasa.gov/misrl213/MISR/MIL3QALN.006/2017.12.01/MISR_AM1_CGAL_1_DEG_WIN_2018_F04_0024.nc)

Figure 7. NC Download Links File

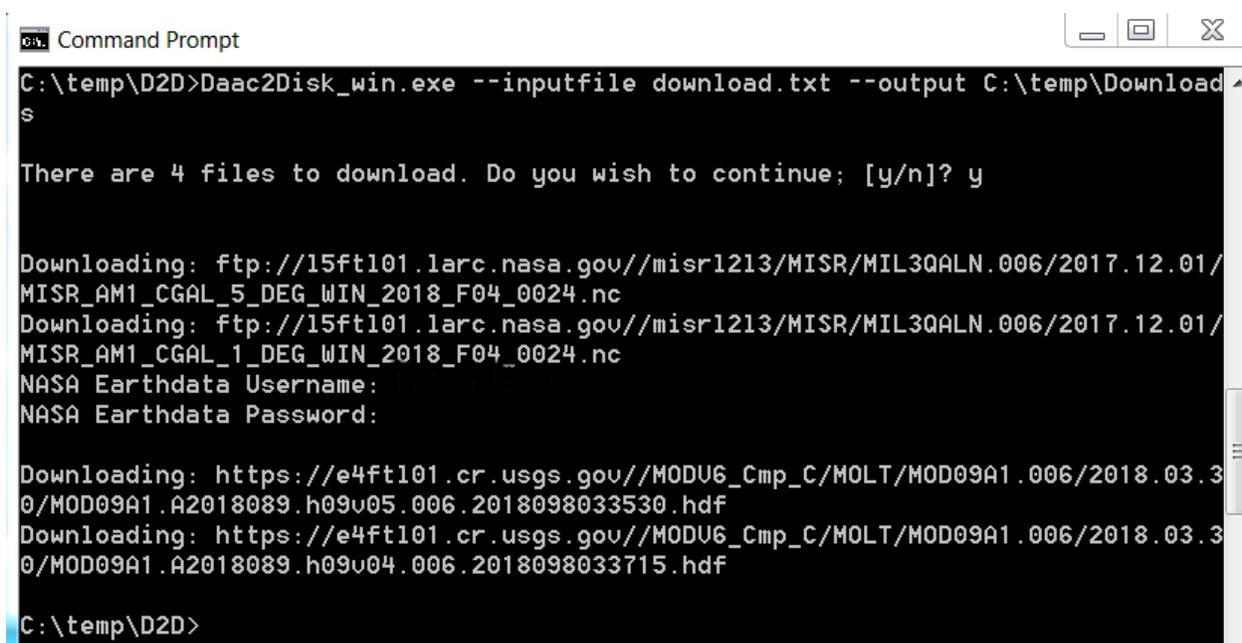
Figure 8 shows an example of what might be in your input file. Notice that your input file can include http URLs and/or ftp URLs. In this example, there are 2 files from LP DAAC and 2 files from LaRC.



```
download.txt - Notepad
File Edit Format View Help
ftp://15ft101.larc.nasa.gov//misr1213/MISR/MIL3QALN.006/2017.12.01/MISR_AM1_CGAL_5_DEG_WIN_2018_F04_0024.nc
ftp://15ft101.larc.nasa.gov//misr1213/MISR/MIL3QALN.006/2017.12.01/MISR_AM1_CGAL_1_DEG_WIN_2018_F04_0024.nc
https://e4ft101.cr.usgs.gov//MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v05.006.2018098033530.hdf
https://e4ft101.cr.usgs.gov//MODV6_Cmp_C/MOLT/MOD09A1.006/2018.03.30/MOD09A1.A2018089.h09v04.006.2018098033715.hdf
```

Figure 8. Input File Example after Merge

Figure 9 shows the script downloading the files listed in the input file.



```
Command Prompt
C:\temp\D2D>Daac2Disk_win.exe --inputfile download.txt --output C:\temp\Download
s
There are 4 files to download. Do you wish to continue; [y/n]? y

Downloading: ftp://15ft101.larc.nasa.gov//misr1213/MISR/MIL3QALN.006/2017.12.01/
MISR_AM1_CGAL_5_DEG_WIN_2018_F04_0024.nc
Downloading: ftp://15ft101.larc.nasa.gov//misr1213/MISR/MIL3QALN.006/2017.12.01/
MISR_AM1_CGAL_1_DEG_WIN_2018_F04_0024.nc
NASA Earthdata Username:
NASA Earthdata Password:

Downloading: https://e4ft101.cr.usgs.gov//MODU6_Cmp_C/MOLT/MOD09A1.006/2018.03.3
0/MOD09A1.A2018089.h09v05.006.2018098033530.hdf
Downloading: https://e4ft101.cr.usgs.gov//MODU6_Cmp_C/MOLT/MOD09A1.006/2018.03.3
0/MOD09A1.A2018089.h09v04.006.2018098033715.hdf

C:\temp\D2D>
```

Figure 9. Command Line Script with Input File

## Order URL Option

After submitting an order via Earthdata Search with the Stage for Delivery Access Method, an email message with an Order URL is sent from each DAAC that hosts the data which was ordered.

Figure 10 shows an example section of an email message received from the LP DAAC. The user would copy the Pull Download Link and paste it as the command line option to download their data as shown in Figure 11.

+++++

ORDERID: 0308011448  
REQUESTID: 0304377583  
EXTERNAL REQUESTID: 6FAC2F4A-2DA4-D79A-9C3C-53CAE6F1942E  
USERSTRING:  
FINISHED: 04/10/2018 08:42:09

MEDIATYPE: HTTPS  
MEDIAFORMAT: FILEFORMAT  
HOST: [e4ftl01.cr.usgs.gov](https://e4ftl01.cr.usgs.gov)  
DIR: /PullDir/030437758368791  
Download Links:  
<https://e4ftl01.cr.usgs.gov/PullDir/030437758368791> ←  
Download ZIP file of packaged order:  
<https://e4ftl01.cr.usgs.gov/PullDir/030437758368791.zip>

Expiration: 04/20/2018 08:42:09  
MEDIA 1 of 1  
MEDIAID:  
GRANULE: UR:10:DsShESDTUR:UR:15:DsShSciServerUR:13:[EDC:  
ESDT: MOD09A1.006

TOTAL FILES: 2

Figure 10. Sample Email

```
C:\temp\D2D>Daac2Disk_win.exe --orderurl https://e4ftl01.cr.usgs.gov/PullDir/030437758368791 --output C:\temp\Downloads
Downloading files from: https://e4ftl01.cr.usgs.gov/PullDir/030437758368791

There are 2 files to download. Do you wish to continue; [y/n]? y

NASA Earthdata Username:
NASA Earthdata Password:

Downloading: https://e4ftl01.cr.usgs.gov/PullDir/030437758368791/MOD09A1.A2017305.h11v04.006.2017314043023.hdf
Downloading: https://e4ftl01.cr.usgs.gov/PullDir/030437758368791/MOD09A1.A2017305.h11v04.006.2017314043023.hdf.xml
```

Figure 11. Order URL Example