Exercise 4 – Ordering Data

For this exercise we will simulate downloading & ordering of the MOD15 Leaf Area Index/Fraction of Photosynthetically Active Radiation (LAI/FPAR) product for parts of Europe.

The MOD15 tiles will be used in later sections of the tutorial. The data itself are already on the CDROM in order to save time. These LAI/FPAR tiles will be used to assess differences in vegetation conditions in Europe from 2002 to 2003. To assess these differences we are interested in imagery from the composite period 225 because during this period Europe experienced extremely dry and warm conditions! Remember that MOD15 (LAI/FPAR) is an 8-day composite image.

Go to the following website: http://edcimswww.cr.usgs.gov/pub/imswelcome/

1.) Log into LP DAAC as a guest. You should become a registered user if you will use it often. There is a tutorial on the LP DAAC website on how to navigate the site.

2.) Type in ‘MOD15’ in the “Text search” field. Hit go. This is what you should see:

If you were searching for land cover you would have used the text “MOD12”, for LAI/FPAR “MOD15”, for surface reflectance “MOD09”, etc.
3.) Choose the version 4 set of MOD15.

It is easy to choose. Simply click the product you want.

4.) Choose the geographic bounding coordinates for the area of interest. For this exercise we are using LAI data for the following region: 18 W to 15° E Longitude and from 45 to 60° N Latitude.

Click the “Display Lat/Lon Range on Map” to be sure the bounding area you chose is correct. It will appear as on the map.
5.) Next, choose the time frame. Since we want imagery from both 2002 and 2003, we should make two separate searches, one for the 2002 data and the other for 2003. This is a good idea because if we entered the dates between August 13 (Julian day 225) 2002 and August 13 (Julian day 225) 2003, the search would return all images between these dates for the desired spatial coverage resulting in approximately 100 images. Start with 2002. Pay close attention to the requirements for entering the desired time!

Many searches, either as a result of broad temporal or spatial selections, will return ten’s if not hundred’s of data granules. Limit your search if necessary.

Choose a Date/Time Range (not required)

Date format: YYYY-MM-DD (1967-06-25) or MM/DD/YYYY (08/25/1997)
Time format: HH:MM (14:30) or HH:MM:SS (14:30:01)

You may also enter a date without a time, a start date only, or an end date only.
Use the help link for information on default values.

Start Date: 08/13/2002
End Date: 08/13/2002

Clear Time Fields

Standard Date Range
Julian Date Range
Annually Repeating

Choose Additional Options (not required)

- Return a maximum of 20 data granules per data set (Range: 1 - 1000).
- Only return data granules which have browse products.
- Allow searches to run for a maximum of 60 minute(s)
- Return DEFAULT metadata in search results
- Only return data granules which were retrieved during the Pay/Right
- Name this query: (will be used in creating a file name when saving the query)

Start Search

Save/Restore Search Criteria (not required)

Save Search Criteria
Restore Search Criteria
Browse...
6.) Click on Start Search button. **BE PATIENT, the search status will be updated very 10 seconds.** You should see the following when finished. Searching may take several minutes or longer depending on your computer and the server load.

Recall the naming convention here.

MOD15A2.A2002225.h18v02.004.2003256101519.hdf
MODXXX.Ayyyyddd.hxxvxx.yyyydddhhmmss.hdf

- **MODXXX** = product and level of product
- **A** = Terra (formally known as EOS-AM1)
- **yyyyddd** = year and year day (001 – 366) for the start of the granule
- **hxxvxx** = MODIS land tile
- **vvv** = a three-digit version number assigned by ECS
- **yyyydddhhmmss** = 4 digit year, 3 digit day, hr, min, and sec of the time (UTC) at which the granule is processed.
7.) Click “Add selections to Cart”

Also use the ‘Show map coverage’ button to visually check if you selected the right tiles.
8. Accept or reject the disclaimer

On August 15, 2001, the Terra MODIS instrument experienced the first of many formatter errors similar to those seen in the fall of 2000. Over the following weeks, the error rate increased from one every few days to several thousand per day. Memory dumps of the formatter patch locations have been performed multiple times and the error address buffer has been cleared once to aid in analysis of the faults. The error rate decreases when the instrument temperature increases, such as during blackbody and SRCA calibrations. Currently, the formatter errors have not degraded the MODIS instrument science data.

Data was processed using B-mode electronics starting on October 30, 2000 through June 15, 2001. Subsequently, the measurement quality has improved dramatically. A new set of quality flags pin points the few remaining noisy detectors. Several previous areas of concern have been adequately addressed in this release and the subsequent post-anomaly A-side data release.

Links that provide a more detailed description of historical and current areas of concern, including the projected impact on the L1B and L2 science, the instrument characteristic causing the effect, the current mitigation strategy, and implementation schedule are available on the MODIS Characterization Support Team (MCST) main page.


Areas of known concern with earlier versions and higher-level data products are described on the web at:


For a complete look at the EOS-AM/Terra mission, go to

http://eos-em.gsfc.nasa.gov/

9.) Choose ordering options and supply necessary shipping information. These steps are self-explanatory and will not be described in the tutorial because we will not order data in order to save time.

Users are encouraged to read the ordering tutorial located in the MODIS Vegetation Productivity (MOD17) User’s Guide located at http://www.forestry.umt.edu/ntsg/.

End of Exercise 4