Ordering MODIS data from LAADS archive

First, navigate to the LAADS DAAC web page : https://ladsweb.modaps.eosdis.nasa.gov/search/
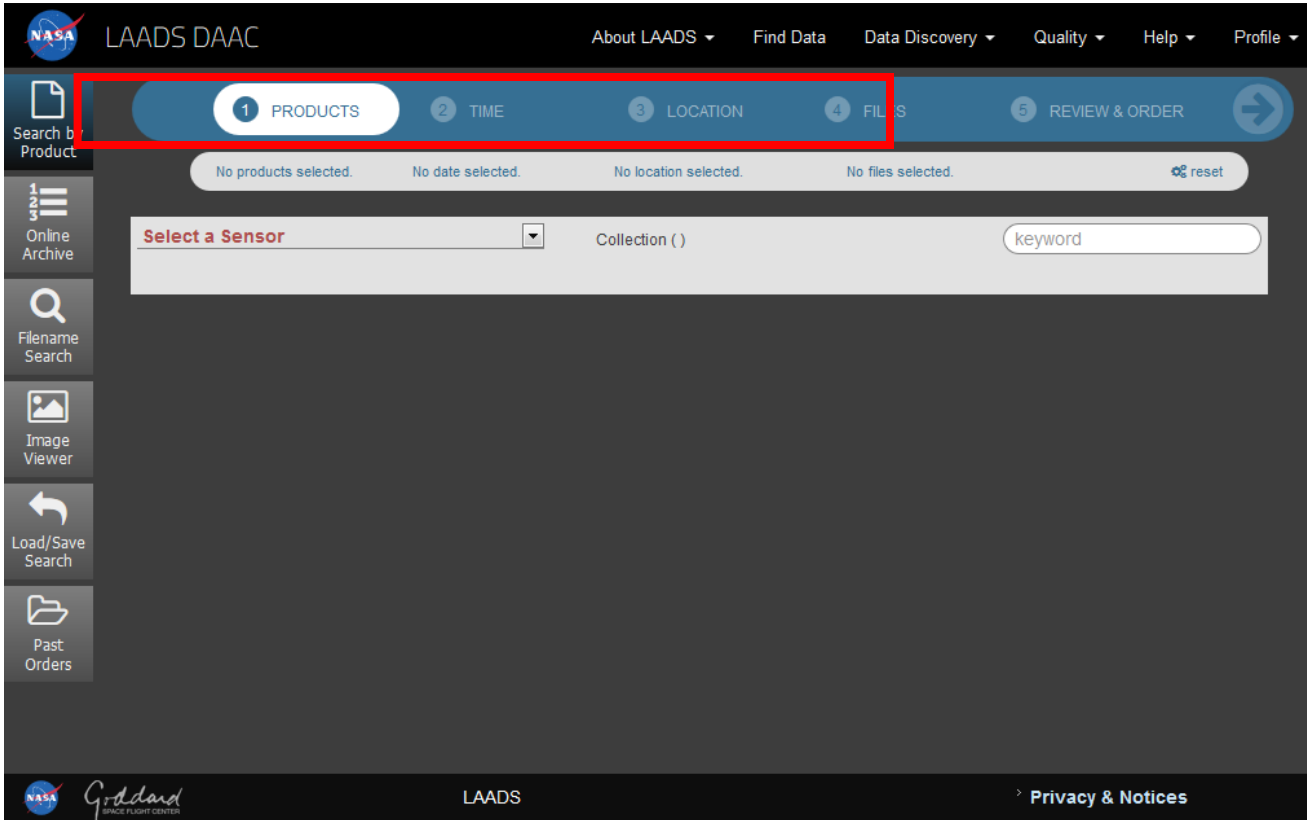
In order to get the data we want, we will go through first four steps which can be found in upper part of the web page. These steps are, in order: **Products, Time, Location and Files** (marked red in the image above). Since we will already get our files in the 4th step it will not be necessary to go to the 5th step.

1. Products

First, in Select a Sensor drop down menu we should select MODIS:Aqua or MODIS: Terra.
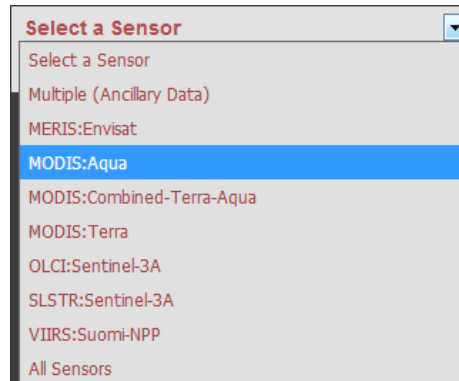
Since it is the same instrument (which means we can find same spectral channels) on both Terra and Aqua satellites we can use the advantage of different overpass times (over the same area) to check which one suit us better for our desired time and location. In this example, Modis:Aqua has been selected.

|Now, new tables will appear (as in the image below).

We are interested in Level 1B Calibrated Radiances. If we look by horizontal resolution, there are three types of Modis data, 1 km (29 channels), 500 m (five channels) and 250 m (two channels) resolution. **HINT:** Overview of MODIS channels will be given in **ADDENDUM** at the end of this document.

In this example we will choose: **MYD021KM Level 1B Calibrated Radiances – 1 km** (image below).

At this point we are finished with first step, so we proceed to the second step, **Time**, by clicking on it.

2. Time

In this step, set the time window from which you want **your data.** There are two possibilities which you can use depending on the time period from which your data is. One day (**Single Date**) or a range of days (**Date Range**). In this example we will look for data from 1st September only, so we pick the option **Single Date**. Also, we chose only Day time data in the **Coverage Selection** part. After you finish with selection, press the button **Add Date**. Also, leave the **Day-Night Boundary** box checked.

Now, we will be able to proceed to the 3rd step **LOCATION**, by clicking on it.

3. Location

There are different ways to select the area of interest. Maybe the easiest one is to navigate through the map to your area and then just press on the **Draw Custom Box (Classic)**. This will disable panning and let you to (using your mouse) draw a box on the map. In this example, wide area surrounding Italy has been selected (image below).
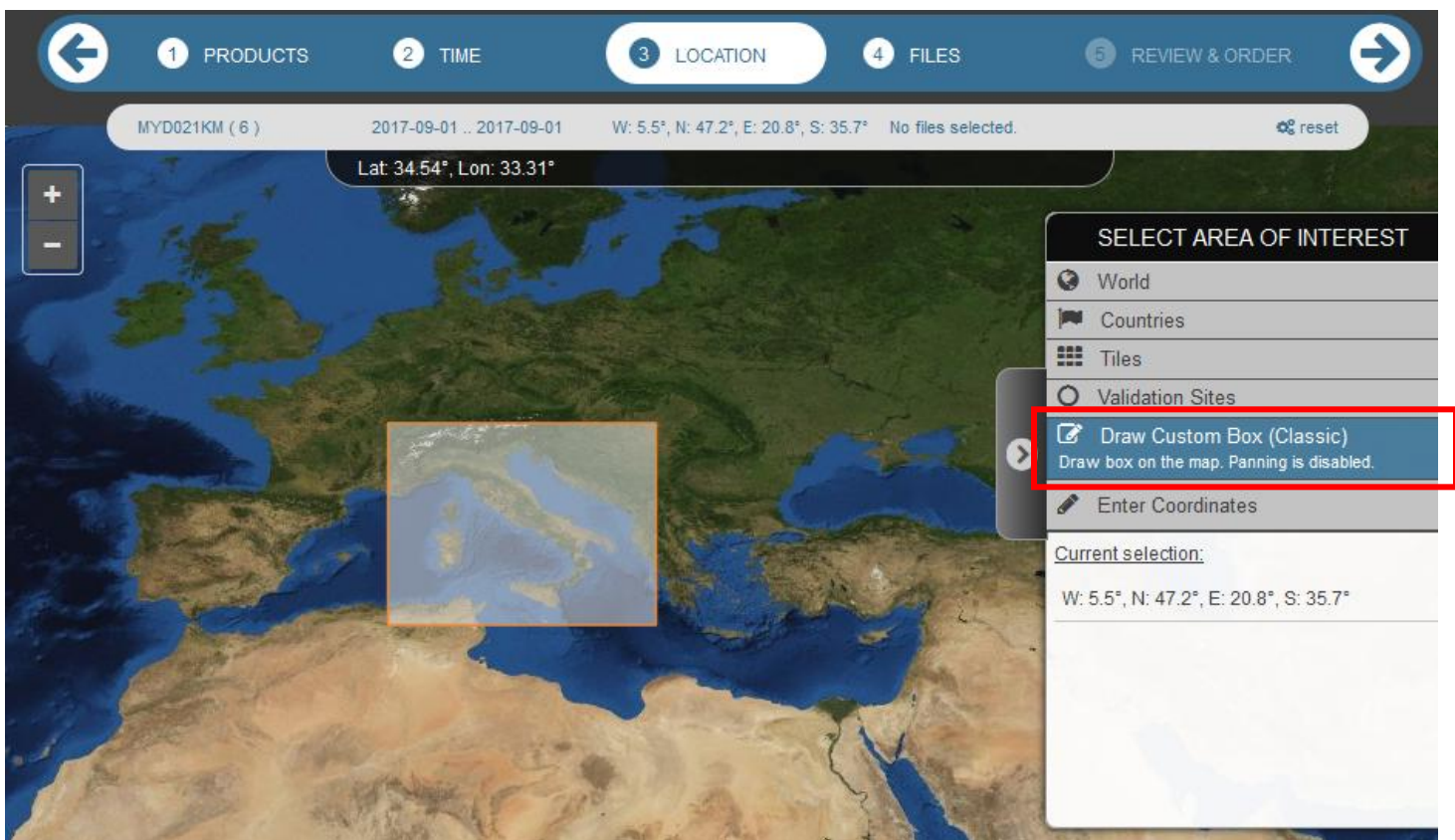
When you are satisfied with your area selection, just proceed to step **Files**, by clicking on it.

4. Files

Now, you will get the table with results of your search. This table has three tabs: **Query Results, Selected and Images** (image above)**.**

In the Query Results, you have the list of all files that meet your requirements. Also, there are two important columns. First one is named **Image**, where you can, by clicking on the image icon, (**don't do that at this moment**) check the preview of every listed file. Second is column named **Download** where you can see the size of files (image above).

Now, we should check which one of the files fits us most. We will do this by clicking on **Images** tab (appears orange in the image above).

This will transfer us to different interface where we will be able to see previews of the files (image below).

Check all the files available on the list (marked with red rectangle in the above image). We should select the one(s) that fit us most. In this example the best one is the third one on the list and this one is selected (image below). After selection go to the tab **Files** above the list (marked red in the image below).
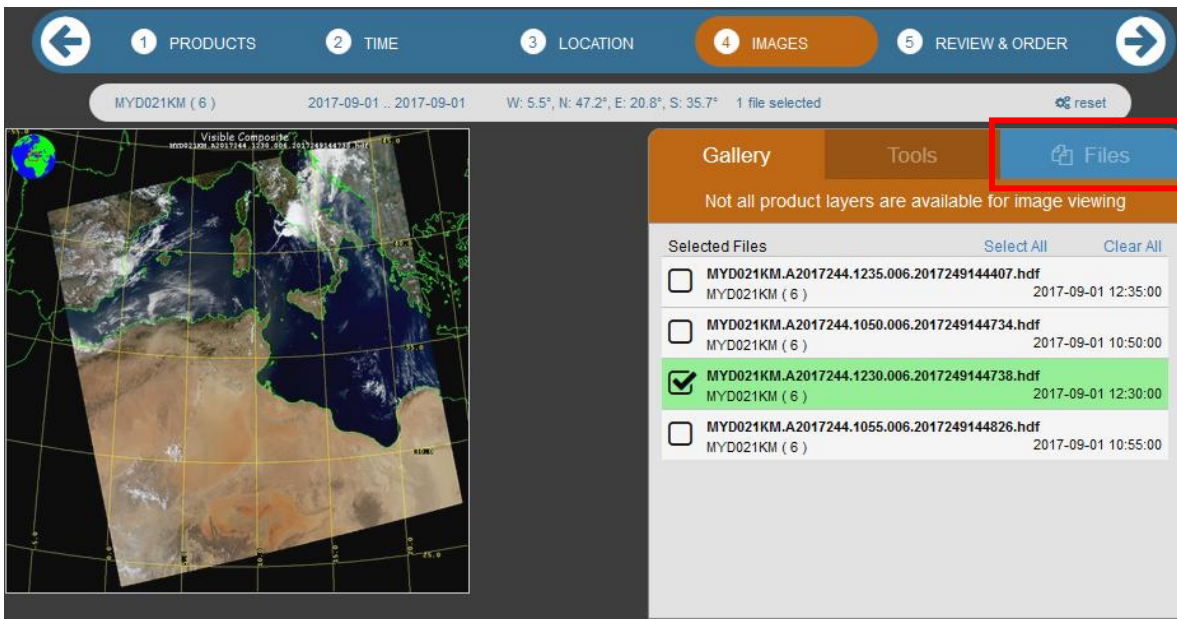
This will bring us back to the old table with all of the results. In order to find the file that we chose, go straight to the second tab named – **Selected** (marked red in the image below). Number inside brackets says how many files we have selected in previous step. In this example it is only one (1).
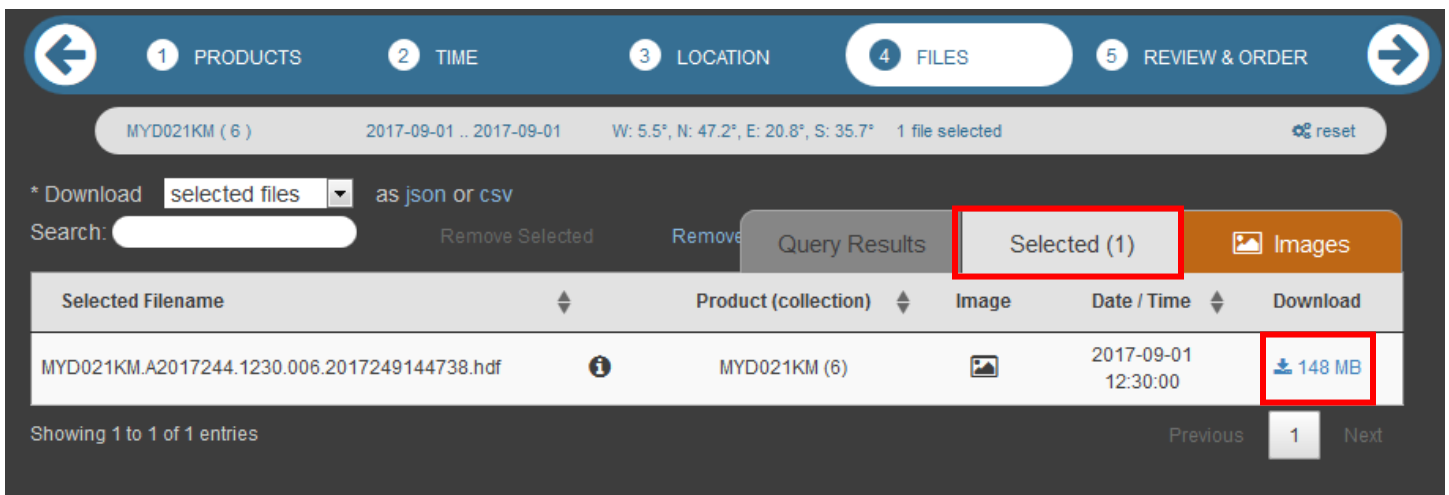
Now, only thing left to do to download this file is to click on icon (marked red, image above) in column **Download** and download will start.

This is the end of Modis data ordering process on LAADS archive.

ADDENDUM

Modis Spectral bands

Band nr.	Bandwidth (nm)	Spectral domain	Spatial res. (m)
1	620 – 670	Shortwave / VIS	250
2	841 – 876	Shortwave / NIR	250
3	459 – 479	Shortwave / VIS	500
4	545 – 565	Shortwave / VIS	500
5	1230 - 1250	Shortwave / NIR	500
6	1628 - 1652	Shortwave infrared/ SWIR	500
7	2105 - 2155	Shortwave infrared/ SWIR	1000
8	405 - 420	Shortwave / VIS	1000
9	438 - 448	Shortwave / VIS	1000
10	483 - 493	Shortwave / VIS	1000
11	526 - 536	Shortwave / VIS	1000
12	546 - 556	Shortwave / VIS	1000
13	662 - 672	Shortwave / VIS	1000
14	673 - 683	Shortwave / VIS	1000
15	743 - 753	Shortwave / VIS	1000
16	862 - 877	Shortwave / NIR	1000
17	890 - 920	Shortwave / NIR	1000
18	931 - 941	Shortwave / NIR	1000
19	915 - 965	Shortwave / NIR	1000
20	3660 – 3840	Longwave thermal infrared/ TIR	1000
21	3929 – 3989	Longwave thermal infrared/ TIR	1000
22	3929 - 3989	Longwave thermal infrared/ TIR	1000
23	4020 – 4080	Longwave thermal infrared/ TIR	1000
24	4433 – 4498	Longwave thermal infrared/ TIR	1000
25	4482 – 4549	Longwave thermal infrared/ TIR	1000
26	1360 – 1390	Shortwave / NIR	1000
27	6535 - 6895	Longwave thermal infrared/ TIR	1000
28	7175 - 7475	Longwave thermal infrared/ TIR	1000
29	8400 - 8700	Longwave thermal infrared/ TIR	1000
30	9580 - 9880	Longwave thermal infrared/ TIR	1000
31	10780 - 11280	Longwave thermal infrared/ TIR	1000
32	11770 - 12270	Longwave thermal infrared/ TIR	1000
33	13185 - 13485	Longwave thermal infrared/ TIR	1000
34	13485 - 13785	Longwave thermal infrared/ TIR	1000
35	13785 - 14085	Longwave thermal infrared/ TIR	1000
36	14085 - 14385	Longwave thermal infrared/ TIR	1000