MODIS Data Links

Rapid Response Page
http://rapidfire.sci.gsfc.nasa.gov/

Rapid Response Real-Time Data Page (images of 5 minute granules)
http://rapidfire.sci.gsfc.nasa.gov/realtime/

MODIS Web Site
http://modis.gsfc.nasa.gov/

Data Distribution Sites (HDF format)

L1B (Calibrated, Geolocated)
http://ladsweb.nascom.nasa.gov/

Land
http://edcdaac.usgs.gov/dataproducts.asp

    Snow/Ice data sets
    http://nsidc.org/daac/modis/index.html

Atmosphere
http://ladsweb.nascom.nasa.gov/

Ocean
http://oceancolor.gsfc.nasa.gov/

Information about HDF Format

http://hdf.ncsa.uiuc.edu/

HDF Utilities including hrepack
http://hdf.ncsa.uiuc.edu/products/hdf4_tools/
Download utilities
ftp://ftp.hdfgroup.org/HDF/HDF_Current/bin/

How to Order MODIS data
L1B and Atmosphere products

1) Go to http://ladsweb.nascom.nasa.gov/
and select data and then search. Make sure that cookies are accepted by your browser (most browsers are set this way already).

2) Under Satellite/Instrument choose either Aqua or Terra

3) Under Group:
Choose Aqua Level 1 Products or Terra Level 1 Products (depends on what you chose in step 1).

3) Under Products:
Choose either 1km, 500m or 250m L1B Calibrated Radiances or you can choose all 3 if you want. You can also choose atmosphere products at this time too.

4) Under Start Date and Time:
Type in the start date of the search period
(example: 07/10/2006 00:00:00

5) Under End Date and Time:
Type in the end date of the search period
(example: 07/15/2006 23:59:59)

6) In the Spatial Selection section choose:
Latitude/Longitude

A map should pop up. You can either outline your area of interest by outlining a box on the map, or you can type in the North, South, East and West Limits in the boxes to the right of the images for your area of interest.

7) Under Coverage Selection Choose:
If you only want Day granules (will contain channels in the visible wavelengths), then make sure the Night and Both boxes are not checked.

8) Click on the Search button at the bottom. This might take a minute or two.

9) Eventually, you will receive a page that contains a list of granules that met your search criteria. Under the Browse column, you can click on the image to get a quick look view of the granule.

10) Click on the Order Files Now button at the bottom of the window.

11) A page will appear that asks for your email address.

12) Once you type that in you can choose FTP Pull to be notified when the data is ready via email and then click on the Order button.

13) A lot of data is already online. If the data that you ordered is online, It will tell you so right away. If not, the data will be staged and you will be told by email when it is ready.

14) Here is an example of an email that I received that tells me how I can get the data.

Your Order ID is: 500143562
The data you ordered has been staged, and you can retrieve the data through anonymous FTP using:

      ftp ladsweb.nascom.nasa.gov
      username: anonymous
      password: kathy.strabala@ssec.wisc.edu

      cd /orders/500143562
      binary
      prompt
      mget *

Subsetting Data

15) If you want to get a subset of data so that the files are not as big, when you are at step 10 select Add Files to Shopping Cart instead of Order Files Now at the bottom of the page. A page will then appear telling you that your files have been added to your shopping cart. From this page, click on the "view your shopping cart" link. This will bring back a list of the files that you found in your search. At the bottom of this web page, there is a section titled Post Processing Selection. Choose the "Post process and order data now" option and then click on the Order button. This will allow you to choose how you would like to subset the data and if you would like to convert the products to geoTIFF format. The "Subset by parameter" means to subset by an array in the file (such as Cloud Phase in the MOD06_L2 file).   If you choose to subset by geographic area of interest, then you will be able to choose a small latitude and longitude region that you are interested in. The file size will then be smaller and will be only over your area of interest. Once you have selected a box, click on the Order button. It will take you to another page where you make subset selections. Then click on the Order button again. Then you will be back at step number11 above. ***** If you subset data, you will not be able to view the file in Hydra *******

MODIS File names:
Prefix.Ayyyyddd.hhmm.005.yyyydddhhmmss.hdf where:

- yyyy is year

- ddd is day of the year

- hh is hour

- mm is minute

- ss is seconds

The first date/time is the data observation time and the second is the time the file was created.

Example: MYD021KM.A2004087.1630.005.2007252102626.hdf is the MODIS 1km L1B file from Aqua. Terra starts with MOD.

Calibration Prefix MOD for Terra, MYD for Aqua

- MOD01 - Level-1A Radiance Counts
- MOD02 - Level-1B Calibrated Geolocated Radiances
−MYD021KM.A2004087.1630.005.2007252102626.hdf - 36 BAND 1km
−MOD02HKM.A2007302.1445.005.2007302233251.hdf - 7 BAND 500m
−MOD02QKM.A2007302.1445.005.2007302233251.hdf - 2 BAND 250m
- MOD03 - Geolocation Data Set
−MOD03.A2007302.1445.005.2007302223440.hdf

Atmosphere   Prefix MOD for Terra, MYD for Aqua

- MOD04_L2 - Aerosol Product
−MYD04_L2.A2003061.1130.004.2004097122504.hdf
- MOD05_L2 - Total Precipitable Water (Water Vapor)
- MOD06_L2 - Cloud Product
−MYD06_L2.A2004087.1630.005.2006178160109.hdf
- MOD07_L2 - Atmospheric Profiles
−MOD07_L2.A2006219.1110.005.2006220114735.hdf
- MOD 08 - Gridded Atmospheric Product
- MOD35_L2 - Cloud Mask
−MYD35_L2.A2004087.1630.005.2007252104816.hdf

Land   Prefix MOD for Terra, MYD for Aqua

- MOD 09 - Surface Reflectance
- MOD 10 - Snow Cover
- MOD 11 - Land Surface Temperature & Emissivity
- MOD 12 - Land Cover/Land Cover Change
- MOD 13 - Vegetation Indices (NDVI & EVI)
- MOD 14 - Thermal Anomalies (Fires)
−MYD14.A2003232.1110.004.2004152085610.hdf
- MOD 15 - Leaf Area Index & FPAR
- MOD 16 - Evapotranspiration
- MOD 17 - Net Photosynthesis and Primary Productivity
- MOD 29 - Sea Ice Cover
- MOD 43 - Bidirectional Reflectance Distribution Function (BRDF)
- MOD 44 - Vegetation Cover Conversion

Ocean   Prefix MOD for Terra, MYD for Aqua

- MOD 18 - Normalized Water-leaving Radiance
- MOD 19 - Pigment Concentration
- MOD 20 - Chlorophyll Fluorescence
- MOD 21 - Chlorophyll a Pigment Concentration
- MOD 22 - Photosynthetically Available Radiation (PAR)
- MOD 23 - Suspended-Solids Concentration
- MOD 24 - Organic Matter Concentration
- MOD 25 - Coccolith Concentration
- MOD 26 - Ocean Water Attenuation Coefficient
- MOD 27 - Ocean Primary Productivity
- MOD 28 - Sea Surface Temperature
- MOD 36 - Total Absorption Coefficient
- MOD 37 - Ocean Aerosol Properties
- MOD 39 - Clear Water Epsilon

MODIS products software

SeaDAS - Level 1B software + ocean product software
http://seadas.gsfc.nasa.gov/

University of Wisconsin - Madison

> Product software (MODIS cloud mask (MOD35), cloud top properties and cloud phase, (MOD06), atmospheric profiles (MOD07), aerosol (MOD04), near infrared water vapor, sea surface temperatures, and software to create product images through the International MODIS / AIRS Processing Package (IMAPP)
> http://cimss.ssec.wisc.edu/imapp/
>
> Products are freely distributed at:
> ftp://ftp.ssec.wisc.edu/pub/eosdb

Direct Readout Lab

Product software for Corrected Reflectance, NDVI, Fires, and Land Surface Temperature
http://directreadout.gsfc.nasa.gov/index.cfm?section=downloads&page=technology