Subject: Re: Read particular band from air temperature image among MOD07 air products

Posted by James Kuyper on Fri, 15 Jun 2007 20:38:12 GMT

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DirtyHarry wrote:
> Goodday, Everyone! I would like to ask how to process MODIS 07 air
> product.
>
> I am working on 3D-MOD07 image. As most of you may know, the dimension
> of this file is, at least in my knowledge....
>
>
>
> In order to get the map of band20, I wrote a source code below, but
> this procedure is not working properly.
>
> ----------------------------
> pro test
> close, /all
> ns = 270
> nl = 406
> nb =20
> file = 'MOD072003001.0130_Ta_5km.img'
> openr, 1, file
>
> image = bytarr(ns, nl, nb)
> readu, 1, image
> close, 1
>
> tvscl, image(*, *, 19)
>
> end
>
> ----------------------
> In my opinion, there must be something wrong at this line shown
> below...
>
> "image = bytarr(ns, nl, nb)"
>
> However, I don't know how to solve this problem... I tried read_jpg,
> and read_gif instead of bytarr, but all of these trials were not so
> successful.

Like all MODIS products, MOD07 is in HDF-EOS format, which is built on
top of HDF. IDL provides wrappers for all of the HDF and HDF-EOS
library functions, and you should be using those routines to read this
file. It's format is laid out at <http://modis-atmos.gsfc.nasa.gov/

MOD07_L2/format.html>. You'll see that it's far more complicated than just a simple multi-dmensional array of a single data type.