
Subject: Re: Help with HDF Format

Posted by [David Fanning](#) on Thu, 15 May 2003 21:20:06 GMT

[View Forum Message](#) <> [Reply to Message](#)

Gautam Bisht (bishtgautam@yahoo.com) writes:

> I am a new user of IDL and facing trouble trying to open MODIS images
> and its products, which are in HDF and HDF EOS format. I am able to
> see that ENVI can open those files but I want to write a code to
> extract the values in those files. Could someone help me out with
> this? maybe by pointing out some sources where I could get more info.

Hopefully those MODIS files are in HDF5 format, so
you can use the new H5_BROWSER function to look at them.
If not (and the MODIS files I have hanging around here
are not), then you will have to use the clunkier
HDF_BROWSER to read them. The H5_BROWSER is slick
and works the way I expect it to. (Did RSI write this!?)
The HDF_BROWSER works too, but I always have to muck
around with it to get what I want. (The boys who
wrote this didn't take that class on GUI design, I
guess.)

If you can't get what you want that way, I found a file
named MAS_READ on one of the MODIS web pages, which
reads "a single band of MODIS Airborne Simulator (MAS)
image data from a Level 1B HDF file". You can probably
get the crux of the HDF matter from this file. It really
is not too hard to figure it all out, at least if you
start with a good example.

Cheers,

David

--

David W. Fanning, Ph.D.

Fanning Software Consulting, Inc.

Phone: 970-221-0438, E-mail: david@dfanning.com

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Help with HDF Format

Posted by [Kelly Dean](#) on Fri, 16 May 2003 18:14:34 GMT

[View Forum Message](#) <> [Reply to Message](#)

CIRA still has their HDF-EOS tip's page on-line ...

<http://www.cira.colostate.edu/special/csuidl/IDLEOS.htm>

Kelly Dean
ATS/CSU

Gautam Bisht wrote:

> Hi all,
> I am a new user of IDL and facing trouble trying to open MODIS images
> and its products, which are in HDF and HDF EOS format. I am able to
> see that ENVI can open those files but I want to write a code to
> extract the values in those files. Could someone help me out with
> this? maybe by pointing out some sources where I could get more info.
>
> Thanxs
> Gautam
>

Subject: Re: Help with HDF Format

Posted by [paul wisehart](#) on Fri, 16 May 2003 19:01:42 GMT

[View Forum Message](#) <> [Reply to Message](#)

On 15 May 2003 13:22:04 -0700, Gautam Bisht <bishtgautam@yahoo.com> wrote:

> I am a new user of IDL and facing trouble trying to open MODIS images
> and its products, which are in HDF and HDF EOS format. I am able to
> see that ENVI can open those files but I want to write a code to
> extract the values in those files. Could someone help me out with
> this? maybe by pointing out some sources where I could get more info.

geov3.pro

<ftp://g0dug03u.ecs.nasa.gov/data/modis/tools/hdf/geoview/geo v.pro>

<ftp://g0dug03u.ecs.nasa.gov/data/modis/tools/hdf/geoview/geo v.pro>

<http://hdfeos.gsfc.nasa.gov/hdfeos/platforminfo.cfm?ID=32&am p;swID=16>

(these should be links to the same thing)

This will let you create an image from L1B1KM, L1BHKM, or L1BQKM files.
Its not easy to create the image unless you know the MODIS hdf format.
Basically if you want a true color image you use either the L1B1KM or
L1BHKM files, and pick bands 1, 4, and 3 (in that order, because they
are appr. Red Green and Blue(or is it Red, Blue, Green?))

Note that band 1 is at 250 meter resolution, and bands 4 & 3 are both
500m resolution. There are different sds data sets for the different
resolutions. (The higher resolution data-sets are included in the
lower resolution hdf files, but they are aggregated to that resolution.)

For example there is band 1 (250 m resolution) data in the L1BHKM (L1B half-kilometer(500m)) hdf file, but it is represented at the 500m resolution. This is why you need half or quarter resolution hdf files to get a true image.

Anyways, the geov3.pro program is all readable IDL code so after you get it working you can browse thru the code, and see *how* it does what it does.

There are other IDL programs available to read the basic data from L1A files. If you had a certain data set in mind I could point you in the right direction.

Post back here if you have any questions.

```
--  
paul  \ /  
wisehart >/  
  <///// $>  
  ||\|
```

```
--  
paul  \ /  
wisehart >/  
  <///// $>  
  ||\|
```

Subject: Re: Help with HDF Format
Posted by [Liam E. Gumley](#) on Fri, 16 May 2003 19:06:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

"Gautam Bisht" <bishtgautam@yahoo.com> wrote in message news:cf200650.0305151222.2959de38@posting.google.com...
> I am a new user of IDL and facing trouble trying to open MODIS images
> and its products, which are in HDF and HDF EOS format. I am able to
> see that ENVI can open those files but I want to write a code to
> extract the values in those files. Could someone help me out with
> this? maybe by pointing out some sources where I could get more info.

Which specific MODIS products are you trying to read?

Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>
