Subject: Landsat 7 HDF Data

Posted by wcapehar on Tue, 04 Apr 2000 07:00:00 GMT

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A fishing expedition:

Has anyone here tried to use ENVI and IDL (with and without the GUIs) to crack open one of the new Landsat7 ETM+ image products (in the HDF format)?

Thanks much.

Bill Capehart

Sent via Deja.com http://www.deja.com/ Before you buy.

Subject: Re: Landsat 7 HDF Data

Posted by Tony Bauna on Fri, 07 Apr 2000 07:00:00 GMT

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<wcapehar@my-deja.com> wrote in message news:8cbpqh\$o12\$1@nnrp1.deja.com...

- > A fishing expedition:
- > Has anyone here tried to use ENVI and IDL (with and without the GUIs)
- > to crack open one of the new Landsat7 ETM+ image products (in the HDF
- > format)?

Yes, I got a 2 CD set from EROS Data Centre. I tried both ENVI's and IDL's HDF readers. They managed to show what kind of data and the different bands where available. However, when I tried to display the images I got error messages is both ENVI and IDL.

I reported this to RSI, but so far no fix just radio silence.

However, you can display the individual bands. They are simple 8bit binary files. The image size can be picked up from the HDF reader in ENVI.

Kinf regards, Tony Bauna

Subject: Re: Landsat 7 HDF Data

Posted by wcapehar on Sun, 16 Apr 2000 07:00:00 GMT

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In article <8ck83d\$8s\$1@news.uit.no>,

"Tony Bauna" <tony.bauna@tss.no> wrote:

> <wcapehar@my-deja.com> wrote in message news:8cbpqh\$o12 \$1@nnrp1.deja.com...

- >> A fishing expedition:
- >> Has anyone here tried to use ENVI and IDL (with and without the GUIs)
- >> to crack open one of the new Landsat7 ETM+ image products (in the HDF
- >> format)?
- > Yes, I got a 2 CD set from EROS Data Centre. I tried both ENVI's and IDL's
- > HDF readers. They managed to show what kind of data and the different bands
- > where available. However, when I tried to display the images I got error
- > messages is both ENVI and IDL.

>

> I reported this to RSI, but so far no fix just radio silence.

>

- > However, you can display the individual bands. They are simple 8bit binary
- > files. The image size can be picked up from the HDF reader in ENVI.

That's what we did too. However, there is another way -- move all the CD contents to a harddrive and rename the "index" hdf file. ENVI wants to leap into that *.hdf suffix no matter what you call it when it comes time to input the image. We confirmed this from EDC and through trail and error here. Hopefully the next version will get it.

Cheers

Bill

Sent via Deja.com http://www.deja.com/ Before you buy.

Subject: Re: Landsat 7 HDF Data
Posted by Phillip David on Thu, 22 Jun 2000 07:00:00 GMT
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wcapehar@my-deja.com wrote:

- > "Tony Bauna" <tony.bauna@tss.no> wrote:
- >> <wcapehar@my-deja.com> wrote:
- >>> A fishing expedition:
- >>> Has anyone here tried to use ENVI and IDL (with and without
- >>> the GUIs) to crack open one of the new Landsat7 ETM+ image
- >>> products (in the HDF format)?

. . .

>> However, you can display the individual bands. They are simple

- >> 8-bit binary files. The image size can be picked up from the
- >> HDF reader in ENVI.
- > That's what we did too. However, there is another way -- move all
- > the CD contents to a harddrive and rename the "index" hdf file. ENVI
- > wants to leap into that *.hdf suffix no matter what you call it when
- > it comes time to input the image. We confirmed this from EDC and
- > through trail and error here. Hopefully the next version will get it.

We've been going through similar problems using external files in HDF. The basic problem is that IDL's support of HDF is primarily designed to allow you to access data all contained in the HDF file. If some of the data is in an external data file, that data is only accessible if you start IDL from within the directory containing that external data. This makes it something of a pain to deal with this type of data.

To ease the pain of this, I wrote a little routine called SwitchHDFFile. We've established a directory naming convention, and by parsing the HDF file name, we can determine the name of the directory for the external data. Our convention creates a subdirectory using the same name as the HDF file, but without the .hdf extension. All our binary files go there. SwitchHDFFile simply parses the HDF file name returned by dialog_pickfile, strips off the trailing '.hdf', traps errors, then CD's to that directory. If there is no external directory, the supposition is that all data is contained in the HDF file, and there is no need to change directories to get at external data.

Since I don't have your data, I don't know if any such convention has been established for your data. In addition, my code is in a classified work area, so I can't pass that along. However, I hope the idea helps.

Phillip