Subject: Help Working with HDF Files
Posted by vinit on Thu, 07 Apr 2005 19:10:03 GMT
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Hello,

First off, I'd like to say that I am a real newbie to IDL and this is the first time that I've heard of the HDF file format. I have bought Dr. Fanning's excellent book and am aware that there is a chapter on working with HDF files. I would be grateful if someone could help me figure out what it is I must do to achieve my goals.

My first goal is to simply read an HDF file (which was given to me by my lab partner - I am a programmer, not a scientist)that contains rainfall precipitation data as an image and display it using IDL (essentially get the same image as when I open it with ENVI).

I have tried running the code found in the "coyote" folder called "hdfread" but the program halts in the middle and gives the following error message:

```
% Compiled module: TEST_ISHDF.
% Compiled module: HDFREAD.
IDL> hdfread
% Compiled module: PICKFILE.
% Loaded DLM: HDF.
Valid HDF file. Opening "E:\IDL_Programs\trmm_data\3B42.991231.6.6.HDF"
Reading number of datasets and file attributes in file ...

No. of Datasets:            2
No. of File Attributes:          2
No. of Palettes:            0

Printing name of each file attribute...
File Attribute No. 0: CoreMetadata.0
File Attribute No. 1: ArchiveMetadata.0

Printing name of each data set and its associated data attributes...
Dataset No. 0: precipitation

Dataset No. 1: relativeError

% HDF_SD_SELECT: Unable to select the HDF-SD dataset (NEWFILEID).
% Execution halted at: HDFREAD          60
E:\IDL_Programs\coyote\hdfread.pro
%                $MAIN$
```

I believe that my data doesn't have the HDF_SD dataset. How to work around this?

I would then like to "process" the data. More explicitly, I'd like to divide the picture into n x n pixel regions, extract the value of each pixel, compute the average value of that region and compare it to a threshold value. If the average value is less than the threshold value I want to assign the whole n x n pixel region (i.e each pixel in that region) a value of -99 else I want to assign the whole region the computed average value. I'm not sure how to go about doing that, but perhaps I am getting ahead of myself.

Thank you for your time and help,

Vinit
