Subject: Re: HDF_SD_ADDDATA with strings

Posted by kostya on Tue, 20 May 2008 22:40:24 GMT

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sorry, forgot to mention I'm using IDL 6.4

Subject: Re: HDF_SD_ADDDATA with strings Posted by jameskuyper on Wed, 21 May 2008 00:14:33 GMT View Forum Message <> Reply to Message

kostya wrote:

> Hi everybody,

>

- > I'm having trouble modifying a string in SD dataset in HDF4 file.
- > Basically I'm trying to overwrite 'true' with 'false' and this is what
- > I get: HDF_SD_ADDDATA: Cannot write 5 elements. The data area is not
- > that big.

>

- > I could not find any option to modify the string size in SD using IDL.
- > Another option would be to delete this dataset and create a new one
- > with the same name but I can't seem to find this option either. Any
- > ideas?

HDF SDSs have a length that can be modified, only if they were initially created with that option. Using the IDL HDF_SD_* interface, this can be done by setting the dimension length to a number less than 1 in the call to HDF_SD_Create(). This can only be done on the last dimension. If that option was selected when the SDS was created, the SDS automatically gets extended when you write beyond it's current length; otherwise, the length is fixed. The SD that you're writing to apparently has a fixed length.

That's why it's generally a better idea to make strings HDF attributes. When you write a new value for an attribute which is bigger than the original value, the old value remains in the file, but it's marked to indicate that it's no longer in use. The new value is written to the file, and the appropriate parts of the file are changed to indicate that the new location is where the current value for the specified attribute is stored. I'm not sure whether this is also done if the new value is shorter.

An HDF attribute can be attached to many kinds of HDF construct: Files, Scientific Datasets, Raster images, Vdatas, or Vdata fields.

Subject: Re: HDF_SD_ADDDATA with strings Posted by kostya on Wed, 21 May 2008 01:06:08 GMT

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thanks a lot,

the HDF files were created with Java NEXUS library so there is not much I can do in regards to creating the files. I looked at the Java code that we use to create and modify HDF files and it looks pretty easy there (changing string size is straightforward), I thought I could do similar things with IDL but it looks like it's not the case.