Subject: Re: HDF4 dimension attributes in IDL
Posted by James Kuyper on Fri, 02 Feb 2007 16:46:56 GMT
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Eric Winter wrote:
> Hi all,
>
> I'm having trouble with an IDL/HDF4 problem, and I was hoping someone
> could point me at the correct solution. We are assigning attributes like
> unitsCategory and scaleType to HDF dimension objects in our HDF4 files.
> Not a big deal, in theory, since the HDF documentation from NCSA
> discusses doing this.
>
> However, I can't seem to find a way to do it in IDL. I can easily add
> and read attributes to SDS objects using IDL, but the only
> dimension-related routines seem to be HDF_SD_DIMGET, HDF_SD_DIMSET, and
> HDF_SD_DIMGETID. The documentation for those routines indicates you can
> ask for a count of the attributes on a dimension, but there is no
> mention on how to set or read those attributes.

An HDF dimension is simply a specialized kind of one-dimensional SDS
that is it's own only dimension. As a result, you can use the dim_id
that you get from HDF_SD_DIMGETID() as the sds_id argument in all
applicable HDF_SD_* functions.

dim_id = HDF_SD_DIMGETID(sddataset_id, dimension_number)

To write an attribute:
HDF_SD_ATTRSET,dim_id, attribute_name, value_to_write

To read an attribute:
attr_index = HDF_SD_ATTRFIND(dim_id, attribute_name)
HDF_SD_ATTRINFO, dim_id, attr_index, data=value_read

Subject: Re: HDF4 dimension attributes in IDL
Posted by Eric Winter on Fri, 02 Feb 2007 18:06:07 GMT
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Cool, that works great! Consider this another strike against the quality
of the IDL HDF "documentation"....

Thanks,
Eric

kuyper@wizard.net wrote:
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