Subject: Re: HDF_SD_ADDDATA problem
Posted by jameskuyper on Fri, 25 Apr 2008 16:15:05 GMT
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adfra...@utas.edu.au wrote:
> Dear Everyone,
>
> I'm having trouble writing to an HDF file using HDF_SD_ADDDATA, but
> let me set the scene quickly first.
>
> I'm using a multispectral satellite imagery dataset in its native L1B
> (HDF-EOS, it's MODIS for those who care!) format. When ordering the
> data, one has the option to channel subset the data to reduce size.
>
> I've written IDL programs to cloud mask the data, which involves
> manipulating an SDS within the HDF. My programs all work fine using
> the full, un-subsetted data, but whenever I try them on the subsetted
> HDFs, they fall over with this error.
>
> ---------- ----------
> % HDF_SD_ADDDATA: Unable to write the specified HDF-SD slice.
> % Execution halted at: HDFEDITSDS 28 /array/work/adfraser/
> MODIS
> images/18_4_08 processing of winter2 data/output/HDFeditSDS.pro
> % $MAIN$
> ---------- ----------
>
> Here is the code which I've been using to write successfully to the
> unsubsetted data but unsuccessfully to the subsetted data:
>
> ---------- ----------
> PRO HDFeditSDS, filename, sdsname, newdata
>
> sdfileid=hdf_sd_start(filename, /rdwr)
>
> ; Find the index of the "Gridded Data" SDS.
> index = HDF_SD_NAMETOINDEX(sdFileID, sdsname)
>
> ; Select the Gridded Data SDS.
> thisSdsID = HDF_SD_SELECT(sdFileID, index)
>
> HDF_SD_AddData, thisSdsID, newdata
>
> hdf_sd_end, sdfileid
>
> END
> ---------- ----------
>

>
> I've checked all the obvously stupid things (file access permissions
> are identical, and the SDS name exists within the HDF). I'm at a loss,
> please help!

SInce you were talking about Gridded data, I presume that you ordered the data with reprojection. I placed an order for MOD021KM for 2008-04-23 08:40, with channel subsetting for bands 5, 6, and 7, and with reprojection to a grid at 1km resolution in an azimulhal equal-area projection centered at 40E 35N. I used

```
filename = $
 'MOD021KM.A2008114.0840.005.2008114172926.bsrpcs_00050029480
8.EV_500_Aggr1km_RefSB_1_1.hdf'
sdsname = 'EV_500_Aggr1km_RefSB_0'
```

I use exactly the code you provided above, except that I added the required call to HDF_SD_EndAccess. I filled in newdata by executing the following commands:

```
HDF_SD_GetData, thisSdsID, olddata
newdata = olddata+500
```

Everything worked perfectly. Therefore, whatever problem you're running into depends upon some of the details you haven't given us. Could you provide some more details about how you triggered this problem?