Subject: Re: export to HDF
Posted by MarioIncandenza on Wed, 16 Jun 2010 19:19:12 GMT
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Hassan,

The solution you will end up with will look a lot like creating a new HDF file, even if you populate it mostly with information from the parent file. If the file has many SDS, this can be rather tedious, but assuming you have a bunch of files to process, it's the way to go.

This is the call sequence for creating and populating an HDF. NOTE: This does NOT use HDF_OPEN() or HDF_CLOSE. It needs a better programmer than I to explain why, but this is complete sequence, the result of trial and error:

```
SDinterface_id = HDF_SD_START(<<outfile>>, /CREATE)
title=<<"TITLE OF NEW HDF FILE">>
HDF_SD_ATTRSET, SDinterface_id, 'TITLE',title
; create SDS in HDF file
for isds=0,nsds-1 do begin
   SDdataset_id =
HDF_SD_CREATE(SDinterface_id,<<SDS_NAME>>,<<SDS_DIMS>>,hdf_type=
<<datatypes_idl2hdf[SDS_TYPE]>>)
   HDF_SD_ADDDATA,SDdataset_id,<<SDS_DATA>>
   HDF_SD_ENDACCESS, SDdataset_id
endfor
;; shut it down
HDF_SD_END, SDinterface_id
```

You will need, for each SDS:
SDS_NAME
SDS_DIMS = SIZE(SDS,/DIM)
SDS_TYPE = DATATYPES_IDL2HDF[SIZE(SDS,/TYPE)]; see NOTE
SDS_DATA

NOTE: This array converts between the output of SIZE and the data type codes used by the HDF interface. See the help for more details:

```
 DATATYPES_IDL2HDF=[-1,21,22,24,5,6,-1,-1,-1,-1,-1,-1,23,25,2 6,27]
```

Hope this helps,

--Edward H.