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Subject: HDF interface

Posted by [Daniel Peduzzi](#) on Wed, 28 Nov 2001 17:37:05 GMT

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Using IDL's HDF interface, does anybody know how to remove or rename SD datasets within an HDF file?

Dan

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Subject: Re: HDF interface

Posted by [James Kuyper Jr.](#) on Wed, 28 Nov 2001 18:49:29 GMT

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Daniel Peduzzi wrote:

> Using IDL's HDF interface, does anybody know how to remove or rename  
> SD datasets within an HDF file?  
>  
> Dan

HDF isn't good about deleting or renaming things. The best you can do is create a new file by copying all the parts of the old file that you want to keep, while dropping or renaming the parts you want to drop or rename. Very annoying. HDF provides routines for deleting or renaming Vgroups, but not for anything else. HDF\_DELDD doesn't actually delete an object from an HDF file, it just removes it from the list of data descriptors. The deleted object still takes up space (which can be released by using the hdfpack routine).

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Subject: Re: HDF interface

Posted by [Daniel Peduzzi](#) on Wed, 28 Nov 2001 19:06:05 GMT

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James Kuyper Jr. wrote in message <3C0531B9.10707@gsfc.nasa.gov>...

> Daniel Peduzzi wrote:

>  
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>> SD datasets within an HDF file?  
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>> Dan

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> object from an HDF file, it just removes it from the list of data  
> descriptors. The deleted object still takes up space (which can be  
> released by using the hdfpack routine).  
>

Excellent, thanks for the info.

Next question: does anyone have a good HDF to NetCDF converter? ;-)

Dan

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Subject: Re: HDF interface

Posted by [Mark Hadfield](#) on Wed, 28 Nov 2001 19:32:32 GMT

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From: "Daniel Peduzzi" <peduzzi@mediaone.net>

> Next question: does anyone have a good HDF to NetCDF converter? ;-)

Not me, but the HDF package includes versions of ncdump and ncgen for  
accessing HDF files via a netCDF interface. So to convert from HDF to netCDF  
you could dump the HDF file to netCDF-text (CDL) form with HDF-ncdump, then  
generate a netCDF-binary file with netCDF-ncgen.

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Mark Hadfield

m.hadfield@niwa.cri.nz <http://katipo.niwa.cri.nz/~hadfield>

National Institute for Water and Atmospheric Research

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Posted from clam.niwa.cri.nz [202.36.29.1]

via Mailgate.ORG Server - <http://www.Mailgate.ORG>

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Subject: Re: HDF interface

Posted by [David Fanning](#) on Wed, 28 Nov 2001 20:53:31 GMT

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Daniel Peduzzi (peduzzi@mediaone.net) writes:

> Next question: does anyone have a good HDF to NetCDF converter? ;-)

Uh, you mean other than IDL? I used to sell

a ton of IDL licenses to NASA Goddard just so people could take all their CDF data to HDF.

Cheers,

David

--

David W. Fanning, Ph.D.  
Fanning Software Consulting  
Phone: 970-221-0438, E-mail: david@dfanning.com  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Toll-Free IDL Book Orders: 1-888-461-0155

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Subject: Re: HDF interface  
Posted by [R.Bauer](#) on Thu, 29 Nov 2001 08:42:34 GMT  
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Daniel Peduzzi wrote:

>  
> James Kuyper Jr. wrote in message <3C0531B9.10707@gsfc.nasa.gov>...  
>> Daniel Peduzzi wrote:  
>>  
>>> Using IDL's HDF interface, does anybody know how to remove or rename  
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>> object from an HDF file, it just removes it from the list of data  
>> descriptors. The deleted object still takes up space (which can be  
>> released by using the hdfpack routine).  
>>  
>  
> Excellent, thanks for the info.  
>  
> Next question: does anyone have a good HDF to NetCDF converter? ;-)  
>  
> Dan

Dear Dan,

in principle I have one.

I have a read\_hdf/write\_hdf and a read\_ncdf/write\_ncdf routine which are uses the same data structure.

But it depends on a static definition of possible attributes for the files.

So I have defined in a definition file how e.g. pi\_name, \_FillValue is written.

If you are able to see a chance to write a definition like this example for your data you will be able to use a lot of icg-data-structure routines.

For example I show you our definition and the one I am using reading nilu HDF files in our structure.

This is our definition

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_source/idl\\_work/rb\\_lib/def\\_icg.pro](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_work/rb_lib/def_icg.pro)

This is a smaller one which shows what is really necessary.

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_source/idl\\_work/rb\\_lib/def\\_nilu.pro](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_work/rb_lib/def_nilu.pro)

This structure is a bit different to our data structure.

To adjust this structure to an ICG-DATA-STRUCTURE I am using a routine

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_source/idl\\_html/dbase/download/ad\\_nilu2icgs.tar.gz](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/ad_nilu2icgs.tar.gz)  
result=ad\_nilu2icgs(read\_hdf('nilu.hdf',def='def\_nilu'))

The following are the routines for read\_hdf and write\_ncdf

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_source/idl\\_html/dbase/download/read\\_hdf.tar.gz](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/read_hdf.tar.gz)

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_source/idl\\_html/dbase/download/write\\_ncdf.tar.gz](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/write_ncdf.tar.gz)

There are mire routines available to work with this data structures.

e.g.

icgs\_correlate

This function computes the Pearson linear correlation and linear regression

coefficients for two parameters in an ICG structure.

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_source/idl\\_html/dbase/download/icgs\\_correlate.tar.gz](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_source/idl_html/dbase/download/icgs_correlate.tar.gz)

The whole library you'll find here:

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_lib\\_intro.html](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html)

If you are using the catalogue look for the category: ICG\_STRUCT

regards

Reimar

--

Reimar Bauer

Institut fuer Stratosphaerische Chemie (ICG-1)

Forschungszentrum Juelich

email: R.Bauer@fz-juelich.de

<http://www.fz-juelich.de/icg/icg1/>

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a IDL library at ForschungsZentrum Juelich

[http://www.fz-juelich.de/icg/icg1/idl\\_icglib/idl\\_lib\\_intro.html](http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.html)

<http://www.fz-juelich.de/zb/text/publikation/juel3786.html>

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read something about linux / windows

<http://www.suse.de/de/news/hotnews/MS.html>

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