
Subject: Re: writing a structure on an HDF5 file
Posted by [Dave Haffner](#) on Mon, 31 Dec 2007 04:49:08 GMT
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djanches,

In principle you can do the following to create an hdf5 compound datatype out of your structure which you can get back using h5_parse (w/ the READ_DATA keyword, of course). Your structure will be under the _data tag.

btw, I wish HDF5 was the default IDL output format, or at least a choice. Matlab affords this already.

Hope this is some help,
Dave

; write a structure to hdf5 as a compound datatype

```
file = 'filename.h5'  
fid = H5F_CREATE(file)
```

```
datatype_id = H5T_IDL_CREATE(structdata)  
dataspace_id=H5S_CREATE_SIMPLE(1) ; not so simple..
```

```
dataset_id = H5D_CREATE(fid,'datastr',datatype_id,dataspace_id)  
H5D_WRITE, dataset_id, structdata
```

```
H5S_CLOSE, dataspace_id  
H5T_CLOSE, datatype_id
```

```
H5F_CLOSE, fid
```

; check out the file

```
s=h5_parse('filename.h5',/read_data)  
help, /structure, s.datastr._data
```

On Dec 29, 8:12 pm, djanc...@gmail.com wrote:

- > I recently started working with HDF5 files and seems that all what I
- > learned about managing regular HDF files in the past is not directly
- > applied to HDF5.
- > What I am trying to do is in theory simple.
- > I am trying to write a structure into an HDF5 file. The structure

- > contains all sort of data (i.e, arrays, integers, and some strings).
 - > I was wondering if there is a simple manner to create a new hdf5 file,
 - > put the structure in it and close it. Something that I could later
 - > open it and use the HDF5 Parse command to read the entire structure at
 - > once.
-

Subject: Re: writing a structure on an HDF5 file

Posted by [djanches](#) on Mon, 31 Dec 2007 16:46:59 GMT

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On Dec 30, 9:49 pm, Dave Haffner <davehaff...@gmail.com> wrote:

- > djanches,
 - >
 - > In principle you can do the following to create an hdf5 compound
 - > datatype out of your structure which you can get back using h5_parse
 - > (w/ the READ_DATA keyword, of course). Your structure will be under
 - > the _data tag.
 - >
 - > btw, I wish HDF5 was the default IDL output format, or at least a
 - > choice. Matlab affords this already.
 - >
 - > Hope this is some help,
 - > Dave
 - >
 - > ; write a structure to hdf5 as a compound datatype
 - >
 - > file = 'filename.h5'
 - > fid = H5F_CREATE(file)
 - >
 - > datatype_id = H5T_IDL_CREATE(structdata)
 - > dataspace_id=H5S_CREATE_SIMPLE(1) ; not so simple..
 - >
 - > dataset_id = H5D_CREATE(fid,'datastr',datatype_id,dataspace_id)
 - > H5D_WRITE, dataset_id, structdata
 - >
 - > H5S_CLOSE, dataspace_id
 - > H5T_CLOSE, datatype_id
 - >
 - > H5F_CLOSE, fid
 - >
 - > ; check out the file
 - >
 - > s=h5_parse('filename.h5',/read_data)
 - > help, /structure, s.datastr._data
- Thanks Dave,

I'll try this

>
> On Dec 29, 8:12 pm, djanc...@gmail.com wrote:
>
>> I recently started working with HDF5 files and seems that all what I
>> learned about managing regular HDF files in the past is not directly
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>> open it and use the HDF5 Parse command to read the entire structure at
>> once.
