
Subject: Reading netcdf/hdf5 files slows down
Posted by [khyde](#) on Thu, 01 Oct 2015 19:12:56 GMT
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Hello,

I have several thousand netcdf and hdf5 files that I need to open and extract data from. As the program loops through the files, it progressively takes longer and longer to read each file. Over the course of 24 hours, it went from taking ~6 seconds to completely read the file to more than a minute. Since seconds add up when reading 50,000+ files, I was hoping someone might know why the program would be slowing down and if there is anything (other than restarting IDL) I can do to fix it.

For the netcdf files I'm using the following procedures:

```
NCDF_OPEN  
NCDF_INQUIRE  
NCDF_ATTNAME  
NCDF_ATTGET  
NCDF_CLOSE
```

And for the HDF5:

```
H5F_OPEN  
H5G_OPEN  
H5D_OPEN  
H5D_READ  
H5D_CLOSE  
H5G_CLOSE  
H5F_CLOSE
```

Lastly, I am being sure to close every file once I am done with it and removing any unneeded variables from memory.

Any suggestions would be greatly appreciated.

Thank you,
Kim

Subject: Re: Reading netcdf/hdf5 files slows down
Posted by [Paul Van Delst\[1\]](#) on Thu, 01 Oct 2015 20:45:13 GMT
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Hello,

On 10/01/15 15:12, KH wrote:

> Hello,

>

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> andextract data from. As the program loops through the files, it
> progressively takes longer and longer to read each file. Over the course
> of 24 hours, it went from taking ~6 seconds to completely read the file
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> NCDF_CLOSE

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> And for the HDF5:

> H5F_OPEN
> H5G_OPEN
> H5D_OPEN
> H5D_READ
> H5D_CLOSE
> H5G_CLOSE
> H5F_CLOSE

>
> Lastly, I am being sure to close every file once I am done with it
> and removing any unneeded variables from memory.

Pawing through the HDF5 docs I see there is also a H5S_CLOSE procedure:

http://www.exelisvis.com/docs/h5s_close.html

where it states:

"Failure to release a dataspace using this procedure will result in
resource leaks."

Do you create dataspace and not release them?

cheers,

paulv

Subject: Re: Reading netcdf/hdf5 files slows down

Posted by [khyde](#) on Fri, 02 Oct 2015 12:49:47 GMT

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On Thursday, October 1, 2015 at 4:45:17 PM UTC-4, Paul van Delst wrote:

> Hello,

>

> On 10/01/15 15:12, KH wrote:

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>>
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>> and extract data from. As the program loops through the files, it
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> where it states:
> "Failure to release a dataspace using this procedure will result in
> resource leaks."
>
> Do you create dataspace and not release them?
>
> cheers,
>
> paulv

Hello,

For every H5x_OPEN I have a corresponding H5x_CLOSE. In my case I'm using H5F, H5G and H5D. I just added H5_CLOSE to the end and I'm hoping that will fix the problem.

Kim
