
Subject: Re: Problem when reading many HDF-EOS file
Posted by [James Kuyper](#) on Mon, 03 Jul 2006 14:30:14 GMT
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Roni Drori wrote:

> Hi,
> I have an IDL program that reads many HDF-EOS file (using EOS_GD_OPEN
>). When I'm reading more the ~100 files the program stops unable to
> open more files.
> What can be done to avoid this problem? (I'm reading simultaneously
> only one file and then closing it with EOS_GD_close)

If you never read more than one file at a time, I'd suspect a memory leak. The HDF-EOS functions contain lots of pairs of book-end functions: if you open something, you should close it. If you attach something, you should make sure to detach it, etc.. In general, the first one of each pair allocates resources (usually including memory), and the second function must be called to deallocate them; if it isn't, you have a resource leak. Check all of your calls to such functions, and make sure that they're matched up properly.

Subject: Re: Problem when reading many HDF-EOS file
Posted by peter.albert@gmx.de on Tue, 04 Jul 2006 06:38:58 GMT
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Hi Roni,

the point of the previous poster about the closing functions is of course correct, however, I fear there is more to the IDL HDF functions. Actually, my first posting to this group ever was about a very similar problem (<http://tinyurl.com/ognwa>), and since then the only proposed solution was to wait for the next IDL release. What was strange was that IDL's memory consumption increased (checked via the Linux "ps" command), while within IDL a HELP, /MEMORY did not show increasing values. So I would guess the memory leak is somewhere in the built-in routines and not necessarily in the user-written IDL code.

Cheers,

Peter

<http://tinyurl.com/ognwa>
Roni Drori schrieb:

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 - > only one file and then closing it with EOS_GD_close)
 - >
 - > Thanks,
 - > Roni Drori.
-

Subject: Re: Problem when reading many HDF-EOS file
Posted by [Maarten\[1\]](#) on Tue, 04 Jul 2006 08:33:37 GMT
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Roni Drori wrote:

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- >). When I'm reading more the ~100 files the program stops unable to
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- > only one file and then closing it with EOS_GD_close)

Others have pointed out that there may be a memory leak in the IDL routines themselves. Things to try:

- Circumvent the EOS layer, and use the HDF-4 routines directly. If the leak is in the EOS routines, this might solve your problem.
- The HDF-5 routines do not have this problem, at least not under Linux. Depending on the volume of the data, h4toh5 may be able to provide you with a suitable alternative.

I've used the HDF-5 routines to perform approximately 60000 file open/close operations in a single run without issues under Linux. IDL 6.2 under Windows gave trouble well before that number was reached.

Maarten

Subject: Re: Problem when reading many HDF-EOS file
Posted by [savoie](#) on Wed, 05 Jul 2006 14:19:24 GMT
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Roni,

I'm tending to agree with kuyper on this one.

kuyper@wizard.net writes:

> Roni Drori wrote:
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> and make sure that they're matched up properly.

I had this problem with EOS_GD_ATTACH, in the documentation, there is not a link to the opposing call EOS_GD_DETACH. Make sure your swath and grid attaches are detached before closing the file. Although closing the file seems like it should clean up the open handles, it doesn't.

Hope this helps.

Matt

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