
Subject: HDF routines cause coredump

Posted by [James Theiler](#) on Fri, 10 Jan 1997 08:00:00 GMT

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Hello,

I've been having a devil of a time trying to use IDL's HDF functions. Any general advice would be appreciated, but the main purpose of this post is to provide an example of code that causes IDL to coredump. I am still not sure exactly what is causing the coredumps, since IDL graciously waited until the code was fairly extensive to start this egregious behavior, but I may have isolated the problem to the HDF_SD_SETTEXTFILE function.

The following is an example of a small routine that causes IDL to coredump; I'm pretty sure it's legal code -- it is practically copied from the IDL Reference Guide (V 4, March '95, 1-422) -- but even if it weren't, I'd still prefer an error message to a coredump. In this case, the coredump is caused by an interaction with 'stop', but I don't know if that's the whole story.

It dumps core on my Sun4, but merely causes an error on the IRIX. When the 'stop' is not invoked (by not using the '/coredump' keyword when running this example), it seems to be okay.

===== Here is an example session:

```
IDL> core_dump_sun
% Compiled module: CORE_DUMP_SUN.
ok
IDL> core_dump_sun,/coredump
% Stop encountered: CORE_DUMP_SUN    12 core_dump_sun.pro
IDL> .con
/n/vendor/bin/idl: 9847 Memory fault - core dumped
```

===== and here is the code:

```
PRO core_dump_sun,coredump=coredump
```

```
;; if the '/coredump' keyword is set, then it
;; core dumps on the Sun4 (but not on IRIX)
```

```
sd_id = HDF_SD_START('a.hdf',/create)
sds_id = HDF_SD_CREATE(sd_id,'a',[3,5],/float)
```

```
HDF_SD_ENDACCESS, sds_id
sds_id = HDF_SD_SELECT(sd_id, 0)
```

```
if keyword_set(coredump) then stop
```

```
;; here is where the coredump occurs,  
;; right after the user types '.con'  
;; at the IDL> prompt  
HDF_SD_SETTEXTFILE, sds_id, 'a.hxt'  
  
;; cleanup (if we ever get here...)  
HDF_SD_ENDACCESS, sds_id  
HDF_SD_END, sds_id  
  
print, "ok"  
END
```

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