
Subject: Re: Can't get out of define mode in ncdf, not specific to variable.

Posted by [Chip Helms](#) on Fri, 16 Nov 2012 18:46:37 GMT

[View Forum Message](#) <> [Reply to Message](#)

This is a bit of a shot in the dark (I don't currently have easy access to a copy of IDL, hopefully that'll change in the next couple days) but this reminds me of when I forget to use `free_lun` when opening files in a loop. Could it be possible that IDL is storing the history of the modes (i.e. `def` and `data`) and simply runs out of reference space?

You might try using `'ncdf_control, cdfid, /sync'` to update the file on the disk before you use `'ncdf_control, cdfid, /redef'`. When I've made netcdf files in the past I've always defined everything before moving on to store the data, so I've never run into this sort of situation myself. I look forward to hearing Exelis' explanation.

Cheers,
Chip

On Thursday, November 15, 2012 5:57:17 PM UTC-5, neleh.mac wrote:

> So I am using IDL to read in ncdf data, and write out (to a new file) the processed data. So I go to define mode, set up the variable, add some attributes, switch to data mode, stick in the data, and then go back to define for the next one.

>

>

>

> e.g.

>

> ncid = ncdf_create(file_name, /Clobber)

>

> londim = ncdf_dimdef(ncid, 'longitude_dim', 144)

>

> latdim = ncdf_dimdef(ncid, 'latitude_dim', 91)

>

>

>

> vid = ncdf_vardef(ncid, 'emission', [londim,latdim], /float)

>

> ncdf_attput, ncid, vid, 'long_name', "Some emissions"

>

> ncdf_control, ncid, /ENDEF

>

> ncdf_varput, ncid, vid, emiss_dat

>

> ncdf_control, ncid, /REDEF

>

>

>

> vid = ncdf_vardef(ncid, 'emission2', [londim,latdim], /float)

```
>
>   ncdf_attput, ncid, vid, 'long_name', "Some emissions 2"
>
>   ncdf_control, ncid, /ENDEF
>
>   ncdf_varput, ncid, vid, emiss_dat2
>
>   ncdf_control, ncid, /REDEF
>
>
>
>   ... etc.
>
>
>
> This works fine for several variables, over and over, until a certain point in the code and then at
> it will not get out of define mode. I commented out that particular part of the code where it was
> falling over, and got it to work fine (but my output file now has one less variable).
>
>
>
> Now the weird part.
>
>
>
> If I take the chunk of code for the variable that it falls at, and copy it back in further up the code,
> it works through it fine. It only fails when it gets to that line again, this time on a variable it wrote
> fine first time round.
>
>
>
> It's like it's failing after going into define mode a certain number of times, it's not specific to any
> variable I'm trying to write, it just always fails on the nth one, regardless of what it is. I've swopped
> round the order it writes them to the file, and they all get written, just not if they happen to be at a
> certain point in the order. I have tried removing attributes from the variables but this doesn't seem
> to have any effect. I am very confused by this, please can you help?
```
