Subject: Re: Can't exit DEFINE mode in netCDF File
Posted by David Fanning on Tue, 06 Oct 2009 21:45:55 GMT

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David Fanning writes:

>
> Folks,
>
> I am writing my first netCDF file in IDL and I am practically
> copying the code out of Ken Bowman's book. I open a file:
>
>   fID = NCDF_CREATE(filename, /CLOBBER)
>
> Then, I define several global attributes, two dimensions,
> and two variables. I also define a couple of attributes
> of the variables. All in that order.
>
> Then, I attempt to get out of DEFINE mode and into DATA
> mode, so I can write the actual variables.
>
>   NCDF_CONTROL, fID, /ENDEF
>
> But at this point I get the following error message:
>
>   % NCDF_CONTROL: Attempt to take the file out of
>   define mode (ENDEF) failed. (NC_ERROR=-45)
>   % Execution halted at: TIMESERIES::CREATE_CLIMATOLOGY 2589
>
> Does anyone have ANY idea what this might be about?

The code is pretty simple:

```
; Create a netCDF file for storing the climatology.
fID = NCDF_Create(filename, /CLOBBER)

; Define dimensions.
xsizeID = NCDF_DIMDEF(fID, 'cols', xsize)
ysizeID = NCDF_DIMDEF(fID, 'rows', ysize)
timeID = NCDF_DIMDEF(fID, 'time', 2)

; Define variables.
vid = NCDF_VARDEF(fID, 'time', [timeID], /LONG)
vid = NCDF_VARDEF(fID, 'climatology', [xsizeID, ysizeID], /DOUBLE)

; Define variable attributes.
NCDF_ATTPUT, fID, 'time', 'units', 'Days since 1601-01-01 00:00:00'
NCDF_ATTPUT, fID, 'time', 'long_name', 'Start and end time. '
```

```
    NCDF_ATTPUT, fID, 'climatology', '_FillValue', fillValue
    NCDF_ATTPUT, fID, 'climatology', 'long_name', 'longish name'

    ; Exit DEFINE mode and into DATA mode.
    NCDF_Control, fID, /ENDEF

    ; Write the variables.
    NCDF_VarPut, fID, 'time', [time[0], time[timepts-1]]
    NCDF_VarPut, fID, 'climatology', climatology

    ; Close the file.
    NCDF_Close, fID
```

At one time I had global attributes in there, but I took them out
and the code worked! So I added them back one by one. Then, it
didn't work again, so I took them all back out. Now it *still*
doesn't work! Something really, really weird going on here, I think. :-(

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")