Subject: netCDF adding variable to an existing file Posted by armor.uah on Tue, 16 Apr 2013 19:51:32 GMT

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All,

I have been attempting to use some of the information I have gathered in this group (From Paul V. on 10/25/2011) to add a couple of variables to my netCDF file (it is a CFradial format, if that matters). I'm running into problems, and I believe the root of it all are the dimensions -- getting them and adding one more. So, this file is open:

- ;1) Put the netcdf file in DEFINE mode (NCDF_CONTROL) NCDF_CONTROL, netid, /REDEF
- ;2) If required, define new dimensions (NCDF_DIMDEF)

;This is the only dimension that is not already defined:

three_el_dim=NCDF_DIMDEF(netid, 'three', three_elev_ang)

;PROBLEM #1: I cannot define this new dimension: "% NCDF_DIMDEF: Unable to create dimension, name in use by another dimension (three)."

;The name "three" was not used anywhere else in my script, tried several other random string here and it breaks there every time.

;Problem #2: I cannot use the dimensions that already exist. I have tried using the outputs from NCDF_DIMINQ and would get errors in the "NCDF_VARDEF" telling me "% NCDF_VARDEF: Unable to define variable, bad dimension id ." so I decided to create new dimensions (I would rather not, but will if I have to!). These are the same size as the existing dimensions:

t dim=NCDF DIMDEF(netid, 'times', time dim)

r_dim=NCDF_DIMDEF(netid, ranges', range_dim)

The error here is the same as above: "% NCDF_DIMDEF: Unable to create dimension, name in use by another dimension"

; For the sake of completeness, here are the other things I'm doing:

;3) Define the new variable (NCDF_VARDEF)

;Trying to use the dimensions that are already defined in the file but failed, these are here with the dimensions I tried to create:

LWCid = NCDF_VARDEF(netid, 'LWC',[t_dim, r_dim])

;errors: "% NCDF_VARDEF: Unable to define variable, name in use by another variable (LWC)." I thought: Sure, that's the name of my variable, so I changed 'LWC' to 'aLWC' and now am getting a different error: "% NCDF_VARDEF: Unable to define variable, bad dimension id ." ... maybe this means that when I get my dimensions issues figured out this error will fix itself??

;This variable has the new dimension I tried to define but failed: Rid = NCDF_VARDEF(netid, 'Rain_rate', [three_el_dim, R_DIM])

- ;4) Repeat 2-3 as necessary for multiple dimensions/variables.
- ;5) Put the netcdf in DATA mode (NCDF_CONTROL)

NCDF CONTROL, netid, /ENDEF

;6) Write the new variable data to the file (NCDF_VARPUT) NCDF_VARPUT, netid, LWCid, LWC NCDF_VARPUT, netid, Rid, R ;error: % NCDF_VARPUT: Variable Inquiry failed, -1 is not a valid variable id.

- ;7) Repeat 6 as necessary for multiple variables.
- ;8) Close the file (NCDF_CLOSE)

NCDF_CLOSE, netid

Any help would be appreciated!