
Subject: writing fixed-length string arrays to netcdf-4
Posted by [Chris O'Dell](#) on Wed, 30 Oct 2013 03:11:03 GMT
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Does anyone know if it is possible to write an array of strings to a variable in a netCDF-4 file as some fixed-length string that has a length > 1? Let me show what I mean, and preface this by saying that I understand HDF-5 better, and in HDF-5 you can definitely do this. I understand that netCDF-4 is built on HDF-5.

Let's define a string array:
stringarr = ['Renee','Tyler','Susan']

METHOD 1 for writing to netcdf file:
(length=1 CHAR array)

```
-----  
id = NCDF_CREATE('myfile.nc', /CLOBBER, /NETCDF4_FORMAT)  
dim1 = NCDF_DIMDEF(id,'dim1',n_elements(stringarr))  
len_dim = NCDF_DIMDEF(id, 'string length', max(strlen(stringarr)))  
vid = NCDF_VARDEF(id, 'Names', [len_dim, dim1], /CHAR)  
NCDF_CONTROL, id, /ENDEF  
NCDF_VARPUT, id, vid, stringarr  
NCDF_CLOSE, id
```

This results in a 2D array of CHAR, with dimension (5,3).

METHOD 2 for writing to netcdf file:
(variable-length STRING)

```
-----  
id = NCDF_CREATE('myfile.nc', /CLOBBER, /NETCDF4_FORMAT)  
dim1 = NCDF_DIMDEF(id,'dim1',n_elements(stringarr))  
vid = NCDF_VARDEF(id, 'Names', [dim1], /STRING)  
NCDF_CONTROL, id, /ENDEF  
NCDF_VARPUT, id, vid, stringarr  
NCDF_CLOSE, id
```

This results in a 1D array of variable-length strings, with dimension (3).

What I really want is a 1D array of fixed-length strings, each with length=5 (in this example). Anyone know if this is possible?

Thanks!
Chris
