
Subject: Re: creating a variable from unknow name
Posted by [R.Bauer](#) on Thu, 30 Dec 2004 13:32:58 GMT
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Andry William wrote:

```
> Dear IDL user,  
>  
> I would to ask some advice on how I can create a variable with the name  
> defined by some value in the memory. I mean: in unix/linux CSH, one can  
> say  
>  
> set a = b1  
> set $a = 4  
> so that the value stored in the variable name b1 is 4  
> echo $b1      (returns)  
> 4  
>  
> I would like to be able to do the same in IDL. I first have to check which  
> variable is present in a file (atcually they are NetCDF files), then  
> assign the values to the name defined in the file.  
>  
> Something like if I see that the variable "Ion" exists in a file, then  
> assign its values to the name "Ion".  
>  
> I am not sure if I need some pointer or object for that.  
>  
> Thanks in advance for your help.  
>  
> Best wishes for the new year for all of you.  
>  
> Andry
```

Dear Andry

probaly you could use our read_ncdf routine. The structure you got returned looks similar to this one.

The short_name is the real netcdf name because the tagname has it's own rules. Only characters which are able to use for variables could be used as tagnames.

This data structure is used for several routines of the icg idl library.

```
: EXAMPLE:  
: result=read_ncdf('ghost.nc')  
: help,result,/str  
: ** Structure <10b5508>, 7 tags, length=3072, refs=1:
```

```

; !FILENAME STRING 'ghost.nc'
; !GLOBAL STRUCT -> <Anonymous> Array[1]
; TIME STRUCT -> <Anonymous> Array[1]
; N2O STRUCT -> <Anonymous> Array[1]
; F12 STRUCT -> <Anonymous> Array[1]
;
;
;
; result=read_ncdf('ghost.nc','F12')
; ** Structure <10b25d4>, 6 tags, length=2256, refs=1:
; !FILENAME STRING 'ghost.nc'
; !GLOBAL STRUCT -> <Anonymous> Array[1]
; TIME STRUCT -> <Anonymous> Array[1]
; F12 STRUCT -> <Anonymous> Array[1]
;
;
; help,result.global,/str
; ** Structure <10b31b0>, 6 tags, length=268, refs=2:
; GPARAM STRUCT -> <Anonymous> Array[1]
; HISTORY STRING Array[1]
; PI STRUCT -> <Anonymous> Array[1]
; DATASET STRUCT -> <Anonymous> Array[1]
; PLATFORM STRUCT -> <Anonymous> Array[1]
; EXP STRUCT -> <Anonymous> Array[1]
;
;
; help,result.f12,/str
; ** Structure <10aa984>, 20 tags, length=808, refs=2:
; STATUS STRUCT -> <Anonymous> Array[1]
; SHORT_NAME STRING 'F12'
; FLAG STRING 'NONE'
; SAMPLE_INTERVAL FLOAT 0.000000
; ADD_OFFSET FLOAT 0.000000
; SCALE_FACTOR FLOAT 1.000000
; UNITS STRING 'pptv'
; FORTRAN_FORMAT STRING 'F6.2'
; LONG_NAME STRING 'CF!!I2!NC!!I2!N'
; DE_LONG_NAME STRING 'CF!!I2!NC!!I2!N'
; DESCRIPTION STRING 'Data Retrieval via smoothed chromatogram
(Gol'.
```
; DE_DESCRIPTION STRING 'DE_DESCRIPTION= Auswertung per gelegli;øettetem
Ch'.
```
; FILL_VALUE FLOAT 999.900
; STDEV_REL DOUBLE 0.0065000000
; PARAM FLOAT Array[87]
; PLOT_MIN FLOAT 460.600
; PLOT_MAX FLOAT 541.000
; VALID LONG Array[84]
; FILLED LONG Array[3]

```

At the moment the server is down. If it is restarted then you could get it from here

http://www.fz-juelich.de/icg/icg-i/idl_icplib/idl_lib_intro.html

cheers

Reimar

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Forschungszentrum Juelich
email: R.Bauer@fz-juelich.de
<http://www.fz-juelich.de/icg/icg-i/>

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a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg-i/idl_icplib/idl_lib_intro.html
