
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 (atcuallly they are NetCDF files), then  
> assign the values to the name defined in the file.  
>  
> Something like if I see that the variable "lon" exists in a file, then  
> assign its values to the name "lon".  
>  
> 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    1.00000
; UNITS          STRING  'pptv'
; FORTRAN_FORMAT STRING  'F6.2'
; LONG_NAME      STRING  'CF!!2!NC!!2!N'
; DE_LONG_NAME   STRING  'CF!!2!NC!!2!N'
; DESCRIPTION    STRING  'Data Retrieval via smoothed chromatogram
(Gol'.
..
; DE_DESCRIPTION STRING  'DE_DESCRIPTION= Auswertung per gegli  tetem
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_icglib/idl_lib_intro.html

cheers

Reimar

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Forschungszentrum Juelich

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<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_icglib/idl_lib_intro.html
