
Subject: Re: how to link the strname with the same name of variables

Posted by [Tony](#) on Tue, 14 Jul 2009 12:23:20 GMT

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On Jul 13, 8:35 pm, mengran <mengra...@gmail.com> wrote:

> Hi,everyone.

>

> I want to output a batch of variables to different files, and the
> variable names like c1, c2,c3,,,,. I use the arrstring to save the
> variable names and get the real variable data from different bands of
> a image. The problem confused me is that it is not possible to output
> the variable in a for loop, although the elements of strarr have the
> same name as the true variable names. There must be some skills that I
> do not know, could you tell them to me please?Thanks a lot!

> best wishes,

> mengran

> pro sub_test

> Path_08 = 'D:\mengr_2\spot_vege\2008_byte\project_pof'

> Path_99 = 'D:\mengr_2\spot_vege\1999_byte\project_pof'

> out_path='D:\mengr_2\sub'

> outFl = strarr(5) & ref = strarr(5)

> for i=1,5 do begin

> outFl[i-1] = strjoin([out_path, strtrim(string(i), 2), '.img']) ;the

> full path of output files

> ; outh = strjoin([out_path, strtrim(string(i), 2)])

> ref[i-1] = strjoin(['c', strtrim(string(i), 2)]) ; the output

> variable names

> endfor

> ;get the data to variables

> envi_open_file,Path_08,r_fid = fid1

> envi_file_query,fid1,nb = nb1, ns = ns1, nl = nl1, dims = dims1

> a1 = ENVI_GET_DATA(fid = fid1,pos = [0], dims = dims1)

> a2 = ENVI_GET_DATA(fid = fid1,pos = [1], dims = dims1)

> a3 = ENVI_GET_DATA(fid = fid1,pos = [3], dims = dims1)

> a4 = ENVI_GET_DATA(fid = fid1,pos = [5], dims = dims1)

> a5 = ENVI_GET_DATA(fid = fid1,pos = [7], dims = dims1)

> map_info = envi_get_map_info(fid = fid1)

> proj = ENVI_GET_PROJECTION(FID = fid1)

> envi_open_file,Path_99,r_fid = fid2

> envi_file_query,fid2,nb = nb2, ns = ns2, nl = nl2, dims = dims2,

> INTERLEAVE = INTERLEAVE

> b1 = ENVI_GET_DATA(fid = fid2,pos = [0], dims = dims2)

> b2 = ENVI_GET_DATA(fid = fid2,pos = [1], dims = dims2)

> b3 = ENVI_GET_DATA(fid = fid2,pos = [3], dims = dims2)

> b4 = ENVI_GET_DATA(fid = fid2,pos = [5], dims = dims2)

> b5 = ENVI_GET_DATA(fid = fid2,pos = [7], dims = dims2)

> c1 = fltarr(ns1,nl1) & c2 = fltarr(ns1,nl1)& c3 = fltarr(ns1,nl1)& c4

> = fltarr(ns1,nl1)& c5 = fltarr(ns1,nl1)

```

> for k = 0,ns1-1 do begin
>   for j = 0,nl1-1 do begin
>     do something
>   endfor
> endfor
>
> for i=0,4 do begin
>   openw,unit,outFI[i],/get_lun
>   writeu,unit,ref[i] ;only can output the string but not the real
> data
>   free_lun,unit
>   ENVI_SETUP_HEAD, map_info=map_info, data_type = 4, nb=1,ns = ns1,nl
> = nl1,offset = 0,INTERLEAVE = INTERLEAVE,FNAME=outFI[i]
> endfor

> ;openw,unit,outFI[0],/get_lun
> ;writeu,unit,c1
> ;free_lun,unit
> ;openw,unit,outFI[1],/get_lun
> ;writeu,unit,c2
> ;free_lun,unit
> ;openw,unit,outFI[2],/get_lun
> ;writeu,unit,c3
> ;free_lun,unit
> ;openw,unit,outFI[3],/get_lun
> ;writeu,unit,c4
> ;free_lun,unit
> ;openw,unit,outFI[4],/get_lun
> ;writeu,unit,c5
> ;free_lun,unit
>
> end

```

My first thought (let me know if I didn't read your code well enough :) is the 'execute' command. You could do something like this:

```

> for i=0,4 do begin
>   openw,unit,outFI[i],/get_lun
>   diditwork=execute('writeu,'+string(unit)+'+',ref[i]) ;only can
output the string but not the real

```

I didn't actually try that code, but you get the idea :) Check out 'execute' in the IDL help

Tony
