
Subject: Re: Why this loop does not work?

Posted by [xiao zhang](#) on Thu, 20 Nov 2008 21:30:16 GMT

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On Nov 20, 2:55 pm, Jeremy Bailin <astroco...@gmail.com> wrote:

> On Nov 20, 3:45 pm, Paolo <pgri...@gmail.com> wrote:

>

>

>

>> Because you are using the same loop variable (i)

>> in two different loops, one of which happens to be inside the other...

>

>> xiao wrote:

>>> Hi~ everyone, I have a short program like this. But there are some

>>> bugs in it that I cannot open all the files in the loop. Anyone got an

>>> idea why is that? Thank you very much :)

>

>>> pro read_rams,fulnam,vname,nvars,data,kx,ky,kz

>

>>> vname=['UP','VP','WP','THETA']

>>> hh=

>>> ['00','01','02','03','04','05','06','07','08','09','10','11'
, '12','13','14','15','16','17','18','19','20','21','22','23']

>>> mm=['00','15','30','45']

>>> ss='00'

>

>>> ; timestep

>

>>> nvars=4 ; number of variable

>

>>> dirnm='test8/anal/' ;/* print to string 'dirnm' */

>>> filehd='a-A-A-2005-12-'

>>> filend='-g4.h5'

>

>>> for j=0,23 do begin ; -----This loop this loop works

>>> here, all the file names are correct :(

>>> for k=0,3 do begin ; -----This loop this loop works

>>> here, all the file names are correct :(

>

>>> fulnam=dirnm+filehd+'17-'+hh(j)+mm(k)+ss+filend

>

>>> openw,3,'data.txt'

>

>>> file_id = H5F_open(fulnam)

>

>>> if file_id ge 0 then begin

>>> for iv=0, nvars-1 do begin

>

```

>>> dataset_id = H5D_open(file_id, vname(iv)) ;/* Open existing
>>> dataset. but only open one file*/
>>> print,file_id
>>> rdata = H5D_read(dataset_id)
>>> dataspace_id = H5D_GET_SPACE(dataset_id)
>>> dimensions = H5S_GET_SIMPLE_EXTENT_DIMS(dataspace_id)
>>> simspc = H5S_IS_SIMPLE(Dataspace_id)
>
>>> if iv eq 0 then begin
>>>   kz=dimensions(0)
>>>   ky=dimensions(1)
>>>   kx=dimensions(2)
>>>   data=fltarr(kx,ky,kz,nvars)
>
>>>   endif
>
>>>   ntot=long(kx)*ky*kz
>>>   a=fltarr(ntot) ;introduce "a" to redistribute the data
>>>   a(*)=rdata
>
>>>   ii=-1L
>>>   for k=0,kz-1 do begin
>>>     for j=0,ky-1 do begin
>>>       for i=0,kx-1 do begin
>>>         ii=ii+1
>>>         data(i,j,k,iv)=a(ii)
>>>       endfor
>>>     endfor
>>>   endfor
>>>   print,'processing variable is ',vname(iv)
>>>   printf,3,data
>
>>>   H5S_CLOSE, dataspace_id
>>>   H5D_close,dataset_id ;/* Close the dataset. */
>>>   endfor
>>>   H5F_close,file_id ;/* Close the file. */
>>>   endif
>>>   print,'finishing process file ',fulnam
>
>>>   endfor ; -----This loop does not work, only processed
>>>   the first file :(
>>>   endfor ; -----This loop does not work, only processed
>>>   the first file :(
>
>>>   close,3
>>>   a=0.
>>>   end
>

```

> Actually, i is fine, it's j and k that duplicated. :-)=

I changed the j,k to a,b at the beginning but it still does not work.And the error changed to :

H5F_OPEN: Expression must be a scalar or 1 element array in this context: FULNAM.

% Execution halted at: READ_RAM\$ 34 /nas/rstor6/xzhang/

read_rams.pro

% \$MAIN\$

:(
