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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](mailto:astroco...@gmail.com)> wrote:

> On Nov 20, 3:45 pm, Paolo <[pgri...@gmail.com](mailto: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 varible

>  
>>> 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 opend 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,'pocessing varible 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_RAMS      34 /nas/rstor6/xzhang/  
read_rams.pro  
%          $MAIN$  
:(
```

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