
Subject: Re: Why this loop does not work?

Posted by [Vince Hradil](#) on Thu, 20 Nov 2008 21:50:14 GMT

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On Nov 20, 3:30 pm, xiao <littledd...@gmail.com> wrote:

> 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
> %          $MAIN$
> :(
```

You use a later on in the code, too... a=fltarr()
