Subject: Re: What could cause disappearing array? Posted by R.G.Stockwell on Tue, 19 Jan 2010 23:04:11 GMT

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"Robin Wilson" <r.t.wilson@rmplc.co.uk> wrote in message news:z7GdnYab-uiEt8vWnZ2dnUVZ8jednZ2d@pipex.net...

> Hi,

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- > I've got a very strange problem in one of my IDL programs. I have two
- > nested FOR loops with some processing happening in the inside loop, and
- > after a bit of processing one of my arrays seems to disappear.

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- > When I comment out all of the code inside the for loop then the loop runs
- > perfectly to the end, and i and j don't get reset to zero part way
- > through.

So, comment out one line at a time, and see what happens. :)

What does the output of those lines say (print, i,j, and the help commands). Are you saying that the array segment_image dissapears between the seg_id++ statement

(the endfor) and the next print, i print, j, and help, statements?

One note: that array is in a common block, who knows who else is manipulating it.

One last thing: your comment and your statement don't match.

Subject: Re: What could cause disappearing array?

Posted by R.G.Stockwell on Tue, 19 Jan 2010 23:05:44 GMT

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```
"R.G. Stockwell" <noemail@please.com> wrote in message
news:hj5dpa$v8n$1@speranza.aioe.org...
> "Robin Wilson" <r.t.wilson@rmplc.co.uk> wrote in message
> news:z7GdnYab-uiEt8vWnZ2dnUVZ8jednZ2d@pipex.net...
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> manipulating it.
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Oops. to elaborate on that (accidently sent the message) Here.

; If one of the pixels had a inequality value greater than 1 then

Subject: Re: What could cause disappearing array? Posted by robintw on Wed, 20 Jan 2010 08:42:12 GMT

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Hi,

Thanks for the feedback. Regarding the comment: that's an error in the comment not an error in the code! Silly me!

I've done a bit more investigation into this. I tried something that Jim Pendleton suggested off-list, which was to insert the code s = n_elements(segment_image) before my for loop, and then check the number of elements throughout my for loop by using the code If (s ne n_elements(segment_image)) then stop, stopping if there's an error.

I tried that, but it didn't catch the error as when segment_image disappears it also seems that s gets reset to zero. I can't see how that happens as s isn't even in the common block.

I've done some more investigation and found that it seems to be related to a for loop that I'm using to call this function. The function below calls the TRY_PLACING_REGION (the function I'm having problems with) from a for loop. When I comment out the for loop it runs fine, but with the for loop there I get this strange disappearing act!

The code for the top function is:

```
PRO DEVEREUX_SEG, t
COMMON SegData, seg_id, segment_image

ENVI_SELECT, fid=fid, dims=dims, pos=pos

WholeImage = GET_IMAGE_DATA(fid, dims, pos)

edge_map = CREATE_EDGE_MAP(WholeImage, 15.0)

segment_image = lonarr(dims[2] + 1, dims[4] + 1)

seg_id = long(20)

FOR win_size = 5, 8 DO BEGIN
    TRY_PLACING_REGION, WholeImage, edge_map, 8
ENDFOR
```

END

and if I comment out the for loop (ie. just leave the TRY_PLACING_REGION call by itself) then it works fine.

Also, Jim wanted to know if I was doing anything unusual in the INEQUALITY FUNCTION. As far as I know I'm not - it's just standard IDL code. I've put the function below in case that helps.

```
FUNCTION INEQUALITY FUNCTION, array, t
 dims = SIZE(array, /DIMENSIONS)
 FOR k = 0, dims[0] - 1 DO BEGIN
  FOR I = 0, dims[1] - 1 DO BEGIN
    FOR b = 0, dims[2] - 1 DO BEGIN
     result = abs(array[k, l, b] - mean(array[*, *, b]))^2 / t[b]
     IF result GT 1 THEN return, 0
    ENDFOR
  ENDFOR
 ENDFOR
 return, 1
END
Thanks for all the help so far - I hope we can manage to solve this!
Best regards,
Robin
On 19/01/2010 23:05. R.G. Stockwell wrote:
>
> "R.G. Stockwell" <noemail@please.com> wrote in message
> news:hj5dpa$v8n$1@speranza.aioe.org...
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>> manipulating it.
>>
>>
>> One last thing: your comment and your statement don't match.
>
>
> Oops. to elaborate on that (accidently sent the message)
 Here.
> ; If one of the pixels had a inequality value greater than 1 then
> continue
> if inequality_result EQ 0 THEN CONTINUE
```

Subject: Re: What could cause disappearing array?
Posted by MarioIncandenza on Thu, 21 Jan 2010 17:17:07 GMT
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"R.G. Stockwell" <noem...@please.com> wrote in messageOne note: that array is in a common block, who knows who else ismanipulating it.

Change the loop variables, see what happens.

Subject: Re: What could cause disappearing array? Posted by Mark[1] on Thu, 21 Jan 2010 22:08:07 GMT

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On Jan 20, 9:42 pm, Robin Wilson <r.t.wil...@rmplc.co.uk> wrote:

..

- > FOR win_size = 5, 8 DO BEGIN
- > TRY_PLACING_REGION, WholeImage, edge_map, 8
- > ENDFOR

I'm curious about that code. As far as I can see, the loop index, win_size, is not used inside the loop, so this code has the effect of calling TRY_PLACING_REGION four times with the same arguments. Is that what you intended?