Subject: A strange error with WHERE Posted by Lindzen on Fri, 31 Jul 2009 03:08:04 GMT

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Dear all.

I come across a strange error with WHERE function. Could you please help me to check it?

Here is part of the code. I will explain below the code.

```
outer1 begin: id hr = where(r03 temp ge 50)
            n hr = n elements(id hr)
if (n_elements(id_hr) gt 1) then begin
 id_max = where(r03_temp eq max(r03_temp))
 lonc = lon_aoc(id_max)
 latc = lat_aoc(id_max)
 ii=0
 outer2 begin: print,ii
 ii=ii+1
  lon left = lonc-ii*0.5
  lon right = lonc+ii*0.5
  lat up = latc+ii*0.5
  lat down = latc-ii*0.5
  id_box = where(lon_aoc ge lon_left)
```

Here lon_left=117.25, is a flot number. lon_aoc is a 80*30 matrix, with many values larger than 117.25. If I use id=where(lon_aoc ge 117.25), id returns right results. However, the above code returns -1 to id box. It is really strange. Could anyone help me? Thank you very much!

Lin

Subject: Re: A strange error with WHERE Posted by David Fanning on Fri, 31 Jul 2009 20:13:46 GMT View Forum Message <> Reply to Message

Paul van Delst writes:

- > I enjoy watching you grok people's problems from afar. It's quite instructive when
- > contemplating debugging in general.

Yeah, getting color to work is so yesterday. My big mission now is to get people to actually think a little. :-)

Cheers.

David

P.S. There are a couple of articles about this Where gotcha on my web page:

http://www.dfanning.com/misc_tips/brokenwhere.html http://www.dfanning.com/misc_tips/noidea.html

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: A strange error with WHERE Posted by David Fanning on Fri, 31 Jul 2009 20:19:36 GMT View Forum Message <> Reply to Message

Paul van Delst writes:

- > I enjoy watching you grok people's problems from afar. It's guite instructive when
- > contemplating debugging in general.

Speaking of which. I have a new book on my desk.

Debugging: The 9 Indispensable Rules for Finding Even the Most Elusive Software and Hardware Problems by David J. Agans

I haven't finished reading it yet, so I haven't reviewed it. But you could probably read it in one or two sittings and probably gleen something useful from it.

A lot of it is what I think of as common sense, but I'm always surprised to see how uncommon it is when I work with other programmers. ;-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: A strange error with WHERE Posted by Paul Van Delst[1] on Fri, 31 Jul 2009 20:44:56 GMT View Forum Message <> Reply to Message

David Fanning wrote:

> Paul van Delst writes:

>

- >> I enjoy watching you grok people's problems from afar. It's quite instructive when
- >> contemplating debugging in general.

>

> Speaking of which. I have a new book on my desk.

>

- > Debugging: The 9 Indispensable Rules for Finding
- > Even the Most Elusive Software and Hardware Problems
- > by David J. Agans

Here's two more for general consumption:

http://www.pragprog.com/titles/ahptl/pragmatic-thinking-and-learning http://www.pragprog.com/titles/pbdp/debug-it

The first one was a good ego-deflater (which is good for debugging) just what one needs to overcome a creeping superiority complex where one believes they know what they're doing! Just when you think you're becoming an expert, you realise you're still an advanced beginner[*]. Sigh. Oh well.

The second one I'm still saving up for.

- > I haven't finished reading it yet, so I haven't reviewed
- > it. But you could probably read it in one or two sittings
- > and probably gleen something useful from it.

>

- > A lot of it is what I think of as common sense, but I'm
- > always surprised to see how uncommon it is when I work
- > with other programmers. ;-)

I hear ya. But, we (IDL programmers I mean) are at an advantage with respect to folks using other languages because we *have* to think illogically to make *any* sense of it all....: o)

cheers,

paulv

- [*] A former boss of a boss of mine once defined four stages of professional development:
 - 1) Unconscious incompetence.
 - 2) Conscious incompetence.
 - 3) Conscious competence.
 - 4) Unconscious competence.

Needless to say it caused a bit of uproar at the time since some people took offense at being labeled incompetent. The pragmatic-thinking-and-learning book above has a more politically correct list:

- 1) Beginner
- 2) Advanced beginner
- 3) Proficient
- 4) Expert

where Expert == the sort of folks that get invited to speak at conferences in exotic locales, all expenses paid.

But I still prefer the first list. :o)