Subject: Re: Huh?? Stddev went crazy!

Posted by pgrigis on Wed, 16 Apr 2008 19:31:30 GMT

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Conor wrote:
```

```
> I'd like to see someone explain this one. My stddev function
  apparently lost all grasp on reality?
>
 IDL> print,stddev([1,2,3,4,5])
      3.07421
                 3.24566
                             3.08206
                                        3.26360
                                                    2.97446
>
  IDL> print,stddev([1.,2.,3.,4.,5.])
      3.07421
                 3.24566
                             3.08206
                                        3.26360
                                                    2.97446
>
  IDL> print,stddev([1.,2.])
>
      3.07421
                 3.24566
>
>
  IDL> print,stddev(findgen(32))
      2.99513
                 3.07421
                             3.24566
                                        3.08206
                                                    3.26360
>
  2.97446
             2.96850
                         3.04474
                                     2.66875
                                                2.77181
 2.83465
      2.77395
                 2.77370
                             2.87829
                                        2.84716
                                                    2.86982
  2.98503
                         2.77602
             2.93160
                                     2.59318
                                                2.83169
 3.30869
                             3.19076
                                        3.19499
      2.67353
                 3.15337
                                                    2.96050
  3.13871
             2.61707
                         2.77854
                                     3.12603
                                                3.20029
  Finally I did this:
>
>
  IDL> .reset
>
  And it returned to normal! Yeah!
> IDL> print,stddev(findgen(32))
  % Compiled module: STDDEV.
  % Compiled module: MOMENT.
      9.38083
>
 IDL > res = findgen(10,10)
  IDL> print,stddev(res)
>
      29.0115
```

> I have not been able to reproduce the crazy behavior since (not that

- > I've tried very hard). Still, it's rather worrisome if the behavior
- > of a built in function isn't reliable!!

Well, here I think I should point out that "stddev" is not a "built-in"

function, but a "library" function (meaning it is distributed as a .pro file).

Hence, anybody can override it by compiling a different function

Subject: Re: Huh?? Stddev went crazy!

Posted by Conor on Wed, 16 Apr 2008 19:41:52 GMT

Paolo

View Forum Message <> Reply to Message On Apr 16, 3:31 pm, pgri...@gmail.com wrote: > Conor wrote: >> I'd like to see someone explain this one. My stddev function >> apparently lost all grasp on reality? > >> IDL> print,stddev([1,2,3,4,5]) 3.24566 3.07421 3.08206 3.26360 2.97446 >> IDL> print,stddev([1.,2.,3.,4.,5.]) 3.07421 3.24566 3.08206 3.26360 2.97446 >> IDL> print,stddev([1.,2.]) 3.07421 >> 3.24566 >> IDL> print,stddev(findgen(32)) 2.99513 3.07421 3.08206 3.26360 >> 3.24566 >> 2.97446 2.96850 3.04474 2.66875 2.77181 >> 2.83465 2.77370 2.84716 2.77395 2.87829 2.86982 >> >> 2.98503 2.93160 2.77602 2.59318 2.83169 >> 3.30869 2.67353 3.15337 3.19076 3.19499 2.96050 >> >> 3.13871 2.61707 2.77854 3.12603 3.20029 >> Finally I did this: > >> IDL> .reset >> And it returned to normal! Yeah! >> IDL> print,stddev(findgen(32)) >> % Compiled module: STDDEV. >> % Compiled module: MOMENT. 9.38083 >> >> IDL> res = findgen(10,10) >> IDL> print,stddev(res) 29.0115 >> >> I have not been able to reproduce the crazy behavior since (not that >> I've tried very hard). Still, it's rather worrisome if the behavior

>> of a built in function isn't reliable!!

>

- > Well, here I think I should point out that "stddev" is not a "built-
- > in"
- > function, but a "library" function (meaning it is distributed as
- > a .pro file).
- > Hence, anybody can override it by compiling a different function
- > called stddev. On the other hand, built-in functions
- > cannot be overridden in that way.

>

> Paolo

I think you guys have solved it! I guess that wasn't that hard... I don't know for sure but it is very likely that I had an array named stddev. I had never realized that could create a potential conflict! I went ahead and put compile_opt IDL2 in my startup file, so hopefully I won't have to worry about this anymore! Now I know what to look for though...