
Subject: Re: strange behaviour of bytscl by large arrays
Posted by [David Fanning](#) on Mon, 23 Apr 2012 16:50:57 GMT
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fawltlanguage@gmail.com writes:

> I think IDL's FINDGEN() implementation is wrong: it uses a float counter instead of an integer one. The following test shows the difference:

```
>
> pro test
> cpu, tpool_nthreads=1
> n=10l^8
> nn=n-1
> a1=findgen(n)           ; real FINDGEN()
> a2=fltarr(n)
> count=0.0
> for j=0l, nn do a2[j]=count++ ; IDL's implementation
> a3=fltarr(n)
> count=0ll
> for j=0l, nn do a3[j]=count++ ; better implementation
> print, a1[nn], a2[nn], a3[nn], format='(3F15.3)'
> end
>
> (Multithreading must be disabled because the starting values for the threads are calculated as
an integer. So the result of FINDGEN() depends on the number of your CPU cores, too :-)
```

Wow! The things you learn about IDL when you look into it, huh? ;-)

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
