
Subject: Re: Rounding errors and the New Graphics image routine

Posted by [robseigel](#) on Thu, 28 Nov 2013 13:22:25 GMT

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On Wednesday, September 25, 2013 3:42:59 PM UTC-4, Gordon Farquharson wrote:

> Hi All

>

>

>

> I'm posting this message as a reference, primarily for myself, in case I ever again find myself beating my head against the wall for several hours.

>

>

>

> IDL> a = findgen(350,332)

>

> IDL> x = 2000. * findgen(350) / 350.

>

> IDL> y = 2000. * findgen(332) / 332.

>

> IDL> p = image(a, x, y, AXIS_STYLE=2)

>

> % Loaded DLM: PNG.

>

>

>

> Everything is fine in IDL land so far...

>

>

>

> IDL> x = 2000. * findgen(350) / 350. + 2.8e5

>

> IDL> y = 2000. * findgen(332) / 332. + 3.8e6

>

> IDL> p = image(a, x, y, AXIS_STYLE=2)

>

> % Loaded DLM: QHULL.

>

> % QHULL: Vector must have 350 elements: YIN

>

> % Execution halted at: \$MAIN\$

>

>

>

> WTF!

>

>

>

> Several hours later (and many more expletives):
>
>
>
> IDL> x = 2000. * findgen(350) / 350. + 2.8D5
>
> IDL> y = 2000. * findgen(332) / 332. + 3.8D6
>
> IDL> p = image(a, x, y, AXIS_STYLE=2)
>
> IDL> p = image(a, x/1000., y/1000., AXIS_STYLE=2)
>
>
>
> I guess I should have realized sooner that the problem would be due to a rounding error.
Maybe this post will help somebody else out.
>
>
>
> Gordon

Very helpful. Thanks!
