
Subject: Rounding errors and the New Graphics image routine
Posted by [Gordon Farquharson](#) on Wed, 25 Sep 2013 19:42:59 GMT
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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
