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Subject: Bug in Trigrd ?

Posted by [hahn](#) on Fri, 25 Mar 1994 02:55:02 GMT

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I found some erroneous data being generated on the boundary by trigrd when interpolating x,y,z triplets into a matrix.

The problem depends on the system you run IDL on:

When you run the following program on a rs6000 or a pc you get incorrect results while running on a sun you get correct results. The problem occurs with version 3.1 and 3.5.1 of IDL (I don't have access to older version).

I assume that triangulate/trigrd is used very much I wonder if there is a bug in IDL or in my program:

```
pro ttrig
x = findgen(30) ; generate some artifical data to show problem
y = x
Z = x # y + 200 ; matrix to plot as reference.
```

```
surface, z, zrange=[ 0, 1000 ]
```

```
; Now pick 30 values randomly choosen to feed into trigrd
```

```
seed = 12345
i = 30 * randomu ( seed, 30 )
j = 30 * randomu ( seed, 30 )
a = x(i)
b = y(j)
c = a * b + 200
```

```
triangulate, a, b, tr
```

```
zmat = trigrd ( a, b, c, tr )
```

```
; zmat should be very close the the original matrix Z above
; or am I missing something ???
```

```
window, 1 ; open another window for a-b comparison
```

```
surface, zmat, zrange=[ 0, 1000 ] ; qed
```

```
end
```

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