
Subject: Re: Box-Whisker plots in IDL

Posted by [David Fanning](#) on Mon, 20 Aug 2007 20:56:08 GMT

[View Forum Message](#) <> [Reply to Message](#)

teich@atmsci.msrb.sunysb.edu writes:

```
> Hi, Suppose data is something simple like:
>
> data=[2,3,5,7,7,10,11,11,12,15,16,17,17]
>
> I get a 75th quartile of 11.0. Shouldn't I get around 15?
```

JD will have to explain the difference between BINSIZE and NBINS to us again. (And I think he is in China for a couple of weeks.) But I got strange results with my HISTOGRAM method, too. Here is a slightly revised program:

```
data=[2,3,5,7,7,10,11,11,12,15,16,17,17]
;box plot needs min, max, median which are straight forward:
```

```
minVal = min(data)
maxVal = max(data)
medianVal = median(data,/even)
```

```
; Find the quartiles.
```

```
h = Histogram(data, NBINS=4, REVERSE_INDICES=ri, $
    MIN=minVal, MAX=maxVal)
```

```
qtr_25th = Median(data[ri[0]:ri[2]-1])
```

```
qtr_75th = Median(data[ri[2]:ri[4]-1])
```

```
Print, minVal, maxVal, medianVal, qtr_25th, qtr_75th
END
```

And the result I get with the new data:

```
2    17    11.0000    7.00000    16.0000
```

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
