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.msrc.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[ri[0]:ri[2]-1])
 qtr 75th = Median(data[ri[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
```

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