Subject: Re: compute quartiles of a distribution
Posted by Thibault Garel on Tue, 18 Oct 2011 16:12:49 GMT
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Thanks to both of you for your answers.

The procedures in summary.pro and cgBoxPlot.pro compute "real" quartiles. Actually, I should not have used this word in my case i guess.

What I want is the interval [M-Q;M+Q] which encompass 75% of the values of the sample around the mean (not the median) value M, where Q is unique (i.e the same at lower and higher values around M). I do not want the 37.5% above M and the 37.5% below. It makes a little difference with what is calculated with your routines.
The idea would be to span the sample starting from the mean, and counting the points at lower and higher values around the mean in an iterative manner, until I have counted 75% of sample. This would give the value of Q at which the 75% is reached. I have a crude idea to do that with for loops but it will take forever...

If you see what I mean, and if you have a piece of code, this could help a lot!

Thanks again.

> bing999 writes:
>> I have sample of data (which distribution is unknown) of mean M. I
>> would like to calculate the quartiles with IDL, i.e what is the value
>> of Q for which 25% (or 75%) of the sample is comprised between [M-Q;M
>> +Q] ?
>> Do you know a routine which does that?
>
> cgBoxPlot.
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")