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Subject: Re: error on stddev estimate

Posted by [Vince Hradil](#) on Tue, 29 Jul 2008 17:01:13 GMT

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On Jul 29, 11:44 am, pgri...@gmail.com wrote:

> R.G. Stockwell wrote:

>> I am analyzing some data, and I am making a point about

>> how the stddev of a time series is changing over time.

>

>> After a quick look through the help, there doesn't seem to be

>> an estimate on the error of a standard deviation estimate (in the code).

>

>> Anyone have that code handy?

>

> Numerical recipes (3d ed.. page 722) says that for gaussians,

> the standard error of the measured standard deviation sigma

> is given by  $\sigma/\sqrt{2*n}$  for a n-element sample.

>

> Ciao,

> Paolo

>

>

>

>> As an example, my data is like 2006 had a mean of 10 and a std dev of 2.

>> 2007 had a mean of 10 and a std dev of 4. I'd like to get estimates

>> on the error in my results of std devs (of the 2 and the 4).

>

>> Cheers,

>> bob

>

>

You could bootstrap to find the standard error:

1-resample, with replacement

2-determine standard deviation

3-repeat lots of times

4-standard error of sd is the standard deviation of the determined values.