
Subject: Re: error on stddev estimate

Posted by [pgrigis](#) on Tue, 29 Jul 2008 16:44:57 GMT

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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

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:

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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.

Subject: Re: error on stddev estimate

Posted by [R.G. Stockwell](#) on Tue, 29 Jul 2008 17:30:33 GMT

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"Vince Hradil" <hradilv@yahoo.com> wrote in message
news:570eec93-2c58-4a2a-b615-b5fb6238f8f4@l42g2000hsc.google groups.com...

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

Thanks Vince and Paolo,
yeah I was thinking bootstrapping would be the way to go.
Paolo, thanks for the tip, i'll check out NR.

Cheers,
bob
