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...
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.

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