Subject: Re: CHISQR_CVF question.
Posted by pgrigis on Wed, 19 Aug 2009 19:29:13 GMT
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Hi Bob,

I guess I am a bit confused as to what you are doing.

Is that it? (I hope I am not making too much a fool of myself :))

- start with a uniform distribution x

- fourier transform: y= FFT(x)

- study histogram of real(y), imaginary(y) and abs(y),
  compare with known distributions (gaussian, chisquare)?

If that is it, maybe you are having a histogram binsize problem?

That's what happens to me very often - I forget to account for
histogram bin widths.

Ciao,
Paolo

On Aug 19, 12:12 pm, "R.G. Stockwell" <noemai...@please.com> wrote:
> I'm just writing up a simple routine to calculate
> significance levels for an FFT of a white spectrum.
> I actually find the distribution of the spectrum, normalize
> it with respect to N number of points and variation so I
> always get the same distribution, and I am comparing it
> to the CHISQR_CVF function (with 2 degrees of freedom, for a
> power spectrum).
>
> I am off by a constant factor (which depends on degrees of freedom)
> but invariant to length of the time series, or the standard deviation
> (since those are normalized out).
>
> any ideas of what step i am missing here? I frankly can't think
> of any other parameter involved here.
>
> cheers,
> bob
>
> PS with degrees of freedom = 2, the constant factor is
> 10.914899