
Subject: Re: CHISQR_CVF question.

Posted by [R.G. Stockwell](#) on Wed, 19 Aug 2009 20:42:46 GMT

[View Forum Message](#) <> [Reply to Message](#)

"Paolo" <pgrigis@gmail.com> wrote in message
news:5c82e9fd-2bb3-4f1b-9ca6-8e0586a00bc0@g19g2000vbi.google groups.com...
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: $y = \text{FFT}(x)$
- study histogram of $\text{real}(y)$, $\text{imaginary}(y)$ and $\text{abs}(y)$,
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

basically yes, $\text{abs}(\text{fft}(ts))^2$, and comparing it to chisquare from the
IDL functions.

I have worked on it, but I think the result is off by a factor of 2.

That is a factor of 2 too stringent.

The binsizes are fine (i think), they are correctly showing the
distribution,
and the cumulative distribution and I normalized wrt to the number of points
so that the histogram is in term of probability.

Perhaps you can check my understanding. If we have a 95% significance
level,
then if we make a spectrum with 1000 points, shouldnt 50 of them be above
that 95% line?

cheers,
bob
