Subject: Re: CHISQR_CVF question. -RESOLVED
Posted by R.G. Stockwell on Thu, 20 Aug 2009 18:39:43 GMT

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"R.G. Stockwell" <noemail87@please.com> wrote in message
news:h6jv18$4cf$1@aioe.org...
>
> "Craig Markwardt" <craig.markwardt@gmail.com> wrote in message
> news:cab41ca6-e1a4-4f73-851f-8b25ab0c1e58@k26g2000vbp.google groups.com...
> On Aug 19, 4:42 pm, "R.G. Stockwell" <noemai...@please.com> wrote:
>> "Paolo" <pgri...@gmail.com> wrote in message
 snip a lot

The upshot is, given a probablity level (or significance level) of 95%
or 0.95 (and degrees of freedom = 2 for 1D power spectra) then the
constant 95% signicicance level is given as follows:

cutoffs= CHISQR_CVF(1-siglevel, degreesoffreedom)
cutoffs = cutoffs*stddeviation^2/(2*length)

stddeviation is the standard deviation of the random time series.
Length is the number of points in the time series.

If you plot cutoff over your power spectrum that is the 95% level.
Therefore 5% of the points (remember to double it if you only have half the
spectrum)
will lie above that line, 95% below. You can input any siglevel you want.
Also, this is normalized to fit any power spectra, invariante to # of points
and
to the variance of the noise.

cheers,
bob

thanks for all the responses.