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Subject: Re: Complications with variance using FFTs  
Posted by [Craig Markwardt](#) on Wed, 21 Jul 2004 18:30:54 GMT  
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olde\_english33@hotmail.com (Eric) writes:

>  
> From what I can gather from my program, the positive frequencies are  
> those from 1:15. Then the frequencies from 16:30 are the complex  
> conjugates of the frequencies from 15:1. Therefore, I think that IDL  
> is already accounting for the complex conjugate in the negative  
> frequencies, unless I am missing something.

I think you are missing that when you multiply the positive frequency components by a complex phase, then you must also multiply the negative frequency components by the complex conjugate, i.e. the negative of that phase. To preserve a real signal that is.

That's another probing question, is the final result of your technique real or complex?

Craig

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