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Subject: Re: Applying scalar functions to arrays  
Posted by [davidf](#) on Fri, 05 Dec 1997 08:00:00 GMT  
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> How can you apply an IDL scalar function to each element in an  
> array, without using for loops?  
>  
> Suppose we have the following array:  
>  
> IDL> a=[0.05,0.01,0.001]  
>  
> Calculating cosine is easy!  
> IDL> print,cos(a)  
> 0.998750 0.999950 1.00000  
>  
> But how about chi-square quantiles...?  
> IDL> print,chisqr\_cvf(a,17)  
> % Compiled module: CHISQR\_CVF.  
> % Expression must be a scalar in this context: <BYTE Array[3]>.

In this particular case, it is a matter of the author of CHISQR\_CVF not realizing that people might want to obtain a vector of values. So the code wasn't written to support it. You could add that modification yourself, if you like, by modifying the CHISQR\_CVF source code in your lib directory.

Without modifying the code yourself, I am afraid you are stuck with a loop. I speak with some experience when I say that it is not always easy to anticipate what users are going to try to do with your code. :-)

Cheers,

David

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