
Subject: Applying scalar functions to arrays
Posted by [vaever](#) on Thu, 04 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]>.  
% Error occurred at: CHISQR_CVF      49  
  /usr/local/rsi/idl_5/lib/chisqr_cvf.pro  
%      $MAIN$  
% Execution halted at: $MAIN$
```

The manual instructs you to avoid for loops when operating on arrays, but doesn't tell you how! Can anyone help?

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