
Subject: need help turning this loop into an array

Posted by [REAL LIDAR GROUP](#) on Thu, 22 Jul 2010 18:51:33 GMT

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I have an old piece of code i am trying to optimize. It has been taken it down to this current state of affairs

I would like to turn the last for loop into some kind of array operation.

Unfortunately my brain cant seem to come up with the solution

```
pro splin2,x1a,x2a,ya,y2a,m,n,x1,x2,y
;+
;  splin2
;
;  Given X1A, X2A, YA, M, N as described in SPLIE2.PRO and Y2A as
;  produced by
;  that routine, and given a desired interpolating point X1, X2, this
;  routine
;  returns an interpolated function value Y by bicubic spline
;  interpolation.
;
;  SOURCE:
;  Numerical Recipes, 1986. (page 101)
;
;  CALLING SEQUENCE:
;  splin2,x1a,x2a,ya,y2a,m,n,x1,x2,y
;
;  INPUTS:
;  x1a - independent variable vector (first dimension)
;  x2a - independent variable vector (second dimension)
;  ya  - dependent variable array
;  y2a - second derivative array (as produced by SPLIE2.PRO)
;  m   - length of first dimension
;  n   - length of second dimension
;  x1  - first coordinate of interpolating point
;  x2  - second coordinate of interpolating point
;
;  OUTPUTS:
;  y   - bicubic spline interpolated function value
;
;  HISTORY:
;  converted to IDL, D. Neill, October, 1991
;-
```

```
;ytmp = fltarr(n)
;y2tmp = fltarr(n)
yytmp = fltarr(n)
```

```
for j=0,m-1 do begin
```

```
    splint,x2a,ya[j,*],y2a[j,*],n,x2,yyt
    yytmp(j)=yyt
```

```
endfor
```

```
; Construct the one-dimensional column spline and evaluate it.
```

```
;
```

```
;print,y2tmp, "ytmp before"
```

```
splinf,x1a,yytmp,m,1.e30,1.e30,y2tmp
```

```
;print, "y2tmp is = : " , y2tmp
```

```
splint,x1a,yytmp,y2tmp,m,x1,y
```

```
;print, " y is = : ", y
```

```
;
```

```
return
```

```
end ; splin2.pro
```
