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Subject: Re: Optimization Question: Sum at each element of array

Posted by [James\[2\]](#) on Tue, 15 Feb 2011 20:15:30 GMT

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On Feb 14, 9:58 pm, Charles Steinhardt <charles.steinha...@ipmu.jp>  
wrote:

> Hello,

>

> I'm trying to optimize the following:

>

> for i=0, 100 do begin

>   y = y + myfunc(x, x + sigma \* (i-50)/10.0, P[2]\*myfunc2(x + sigma

> \* (i-50)/10.0), sigma)

>   endfor

>

> Here, x, y, and sigma are arrays of the same cardinality. I know the

> for loop is slow in IDL compared to array operations, but I'm having

> problems finding a faster way to do this. Is it really faster to make

> an array of findgen(101) and then do some sort of summation over

> that?

>

> I'm hoping somebody has run into this before - I'd appreciate any

> advice you have!

>

> Thank you,

>

> -Charles

One simple optimization step is to replace:

```
y = y + (blahblahblah...)
```

with

```
y += (blahblahblah...)
```

This avoids making IDL acquire memory each iteration to store the  
result of y + (blahblahblah...).

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