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Subject: Re: plot function and legend in a for loop  
Posted by [Paul Van Delst\[1\]](#) on Fri, 04 Sep 2015 19:24:58 GMT  
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On Friday, September 4, 2015 at 8:25:37 AM UTC-4, andrea...@gmx.de wrote:

> Dear all,  
>  
> I'm trying to create an indefinite number of lines in one plot. Additionally the goal is to additionally get a legend.  
>  
> I was trying to do this somehow like this:  
>  
> p=plot(spec(0), name=names(0))  
>  
> for i=1,n\_elements(spec-1) do p1=plot(spec(i), name=names(i), /over)  
>  
>  
> l=legend(target=[p,p1])  
>  
> doing that, not unsurprisingly, I get only the first and last name in the legend.  
>  
> Is there a way to mitigate the issue other than adding if statements like  
>  
> if n\_elements(spec) gt 2 then p3=plot ....  
> if n\_elements(spec) gt 3 then p4=plot ....  
>  
> with this way, no matter how many of these lines I add I would at some day end up with some plots not being plotted ;-)  
>  
> thanks a lot and best regards  
> Andreas

I would try something like this:

```
p=objarr(n)
for i = 0, n-2 do begin
  p[i] = plot(...., name=names[i],..., overplot=i)
endfor
l = legend(target=p)
```

cheers,

paulv

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