
Subject: plot function and legend in a for loop
Posted by [andreas.brunn](#) on Fri, 04 Sep 2015 12:25:34 GMT
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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

Subject: Re: plot function and legend in a for loop
Posted by [Alain Kattnig](#) on Fri, 04 Sep 2015 12:39:30 GMT
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Le vendredi 4 septembre 2015 14:25:37 UTC+2, andrea...@gmx.de a écrit :

> Dear all,

>

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plots not being plotted ;-)
>
> thanks a lot and best regards
> Andreas

I use IPLOT which is less open to manipulations but quicker to code

```
IPLOT,spec[0],NAME=name[0],/INSERT_LEGEND  
FOR number=1,Nbr_names DO IPLOT,spec[number],NAME=name[number],/INSERT_LEGEND
```

Best

Subject: Re: plot function and legend in a for loop
Posted by [andreas.brunn](#) on Fri, 04 Sep 2015 12:40:50 GMT
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On Friday, September 4, 2015 at 2:25:37 PM UTC+2, andrea...@gmx.de wrote:

> Dear all,
>
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additionally get a legend.
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plots not being plotted ;-)
>
> thanks a lot and best regards
> Andreas

Ok I have tried the most obvious last and just got rid of the target keyword. In this case it did what
I wanted from the beginning.

Nevertheless. Is there a way to address properties explicitly in cases like that?

thanks again,
Andreas

Subject: Re: plot function and legend in a for loop
Posted by [andreas.brunn](#) on Fri, 04 Sep 2015 12:45:04 GMT
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On Friday, September 4, 2015 at 2:39:32 PM UTC+2, kallisthene wrote:

> Le vendredi 4 septembre 2015 14:25:37 UTC+2, andrea...@gmx.de a écrit :
>> Dear all,
>>
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>
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> FOR number=1,Nbr_names DO
IPLOT,spec[number],NAME=name[number],/INSERT_LEGEND
>
>
> Best

Thanks a lot, I'll give it a try ... never tried the itools,

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,
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>
> 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

Subject: Re: plot function and legend in a for loop
Posted by [Paul Van Delst\[1\]](#) on Fri, 04 Sep 2015 19:26:24 GMT
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On Friday, September 4, 2015 at 3:25:02 PM UTC-4, paul.v...@noaa.gov wrote:

> for i = 0, n-2 do begin

Obviously (I hope) I meant "n-1" not "n-2".

Argh!

cheers,

paulv
