
Subject: Re: /YNOZERO

Posted by [Chris Lee](#) on Sat, 19 Feb 2005 14:30:17 GMT

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In article <cv573u\$mmc\$1@news.nems.noaa.gov>, "Mr. No Address"
<no_given_address@landofthelost.net> wrote:

> I'm trying to create a plot with a fixed YRANGE for YAxis=0 and a self
> scaling range incorporating /YNOZERO for YAxis=1. Here is the code:
> PLOT, TIME, DATA.TEMP1, COLOR=0, /NODATA, YRANGE=[30,45], YSTYLE=8
> OPLOT, TIME, DATA.TEMP1, COLOR=1
> AXIS, YAxis=1, /YNOZERO, /Save
> OPLOT, TIME, DATA.TEMP2, COLOR=2
> The above code produces a YAxis=1 that is the same scale as YAxis=0. The
> only way I'm able to get YAxis=1 to a scale different than YAxis=0 is to
> explicitly set the range.
> Gary

What do you want Yaxis=1 to scale to? it doesn't know about the data, it
only knows what went into the environment variables, !y.crange and
!y.range. If you want a different scale yaxis=0, you will have to give it
a range.

what might do what you want is the following

```
;test data
```

```
x=findgen(100)*10.*!DTOR
```

```
a=sin(x)*10+100.
```

```
b=a-20.
```

```
position=[0.1,0.1,0.9,0.9]
```

```
black=fsc_color('black',255) & white = fsc_color('white',0) & red=fsc_color('red', 100)
```

```
plot, a, ystyle=8, yrange=[80,120], color=black, background=white,position=position
```

```
plot, b, /ynozero, xstyle=5, ystyle=5, color=red,/noerase, position=position
```

```
axis, 100., yax=1, color=red
```

```
....
```

```
....
```

I imagine there are better ways though.

Chris.

Subject: Re: /YNOZERO

Posted by [Mr. No Address](#) on Tue, 22 Feb 2005 16:40:01 GMT

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Christopher Lee wrote:

> In article <cv573u\$mmc\$1@news.nems.noaa.gov>, "Mr. No Address"
> <no_given_address@landofthelost.net> wrote:

```

>
>
>
>> I'm trying to create a plot with a fixed YRANGE for YAxis=0 and a self
>> scaling range incorporating /YNOZERO for YAxis=1. Here is the code:
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>> The above code produces a YAxis=1 that is the same scale as YAxis=0. The
>> only way I'm able to get YAxis=1 to a scale different than YAxis=0 is to
>> explicitly set the range.
>> Gary
>
>
> What do you want Yaxis=1 to scale to?

```

I'd like YAxis=1 to self scale using DATA.TEMP2 in the following OPLOT line. I want the /YNOZERO option so that zero is not used for the min Y value. I did think about doing something similar to your code below. I'm using !P.MULTI = [0,2,2] though and each new instance of Plot creates a plot in the next panel. Of course, there is probably a way to prevent that... Maybe I'd have to use POSITION instead of !P.MULTI.

Gary

```

> it doesn't know about the data, it
> only knows what went into the environment variables, !y.crange and
> !y.range. If you want a different scale yaxis=0, you will have to give it
> a range.
>
> what might do what you want is the following
> ;test data
> x=findgen(100)*10.*!DTOR
> a=sin(x)*10+100.
> b=a-20.
> position=[0.1,0.1,0.9,0.9]
> black=fsc_color('black',255) & white = fsc_color('white',0) & red=fsc_color('red', 100)
> plot, a, ystyle=8, yrange=[80,120], color=black, background=white,position=position
> plot, b, /ynozero, xstyle=5, ystyle=5, color=red,/noerase, position=position
> axis, 100., yax=1, color=red
>
> ;;;;
> I imagine there are better ways though.
>
> Chris.

```
