
Subject: Re: Looking for more elegant plot scaling...
Posted by [ben.bighair](#) on Sun, 19 Jun 2011 01:57:45 GMT
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Hi,

On 6/18/11 1:16 AM, Balt wrote:

```
> Hi all,  
>  
> I'm OPLOTting 3 curves on a fourth one. Is there a more elegant way to  
> scale a plot to YRANGE=[maxy,miny] than this:  
>  
> ; get the y max for the plots  
> maxy = MAX(temp_obsdata)  
> IF MAX(splined_wvrdata) GT maxy THEN maxy = MAX(splined_wvrdata)  
> IF MAX(residuals) GT maxy THEN maxy = MAX(residuals)  
> IF MAX(interp_obsdata) GT maxy THEN maxy = MAX(interp_obsdata)  
>  
> miny = MIN(temp_obsdata)  
> IF MIN(splined_wvrdata) LT miny THEN miny = MIN(splined_wvrdata)  
> IF MIN(residuals) LT miny THEN miny = MIN(residuals)  
> IF MIN(interp_obsdata) LT miny THEN miny = MIN(interp_obsdata)  
>  
> Maybe something a bit more C macro-ish... ?
```

I don't know about C stuff, but IDL's compare-and-assign operators could be handy here...

```
IDL> a = randomn(s,10)  
IDL> b = randomn(s,10)  
IDL> c = randomn(s,10)  
IDL> print, a,b,c  
    0.774450  0.0338028  -2.49289  -0.430953   2.15833  
0.868524  -0.145793   1.13590   0.726517   1.28041  
    -1.14027  -0.520221  -0.283700  -0.849713   0.00405929  
-0.525046  -0.335924  -0.548919   1.01423   0.0764202  
    2.04586  0.00412738   1.72472   0.707579   0.997633  
1.72583   0.913348   0.699497   1.20014   0.907764  
IDL> maxy = max(a) > max(b) > max(c)  
IDL> print, maxy  
    2.15833  
IDL> maxy = max(a, min = mina) > max(b, min = minb) > max(c, min=minc)  
IDL> print, mina,minb,minc  
    -2.49289  -1.14027   0.00412738  
IDL> miny = mina < minb < minc  
IDL> print, miny  
    -2.49289
```

You could also simply concatenate all of the arrays together, but that seems like a lot of overhead.

Cheers,
Ben
