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
