Subject: Re: plotting x-y error bars in IDL
Posted by David Fanning on Tue, 10 Dec 2013 10:37:12 GMT
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Madhavan Bomidi writes:

> As suggested, I replaced the following lines in my code, I don't see even lat-lon points that I was able to see earlier. Now, I see only a black grid map with lat-lon axes. I still don't understand why to invert the data and why no display of points or error bars???
>
> xy = map -> Inverse(xlon,ylat)
> lon = REFORM(xy[0,*]) & lat = REFORM(xy[1,*])
> cgPlotS, xlon, ylat, PSYM=16, SYMSIZE=1.2, MAP=map, COLOR='red'
>
> ; Draw the error bars in the signal Y
> yhigh = map -> Inverse(y_higherr, ylat)
> ylow = map -> Inverse(y_lowerr, ylat)
>
> lon_high = REFORM(yhigh[0,*])
> lon_low = REFORM(ylow[0,*])
> cgErrPlot, lon, lon_high, lon_low, COLOR='blu5',Thick=thick
>
> ; Draw the error bars in the signal X
> xhigh = map -> Inverse(xlon, x_higherr)
> xlow = map -> Inverse(xlon, x_lowerr)
> lat_high = REFORM(xhigh[0,*])
> lat_low = REFORM(xlow[0,*])
> cgErrPlot, lat, lat_high, lat_low, COLOR='blu5',Thick=thick, /Horizontal
>
>
> Thanks in advance.

Not sure what I was smoking yesterday (or maybe it is just the cloud from OTHER people smoking here in Colordao), but all of those "Inverse" calls should be changed to "Forward" calls. Sheesh. I guess I've never seen map projections before. :-(

It is hard to write code without having data to run with it. I'm just like everyone else, I make all KINDS of errors.

```
xy = map -> Forward(xlon,ylat)
lon = REFORM(xy[0,*]) & lat = REFORM(xy[1,*])
cgPlotS, xlon, ylat, PSYM=16, SYMSIZE=1.2, MAP=map, COLOR='red'

; Draw the error bars in the signal Y
yhigh = map -> Forward(y_higherr, ylat)
ylow = map -> Forward(y_lowerr, ylat)
```

```
lon_high = REFORM(yhigh[0,*])
lon_low = REFORM(ylow[0,*])
cgErrPlot, lon, lon_high, lon_low, COLOR='blu5',Thick=thick

; Draw the error bars in the signal X
xhigh = map -> Forward(xlon, x_higherr)
xlow = map -> Forward(xlon, x_lowerr)
lat_high = REFORM(xhigh[0,*])
lat_low = REFORM(xlow[0,*])
cgErrPlot, lat, lat_high, lat_low, COLOR='blu5',Thick=thick, /Horiz
```

Let me know if that works better. If not, I'll probably just rewrite cgErrPlot. In fact, I may do that anyway. It is a total mess. I should never have based it on the IDL routine of the same name. :-(

Cheers,

David
--
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")
