

Folks,

As I was answering a question about Coyote Graphics this morning, it suddenly occurred to me that I knew how to fix one of the biggest annoyances in the Coyote Graphics system for me. This is the problem of wanting to use a Greek or other symbol (an Angstrom symbol, for example) in a plot or axis title in a command that I've put into the resizable graphics window, cgWindow.

I can certainly specify these symbols using cgSymbol, but the problem is that these symbols need to be evaluated at run-time, and when you use them as keywords the value returned by cgSymbol is hard-coded as the keyword value for the command execution. But, since the symbol code is different for PostScript than it is for the display, it makes it very difficult to get PostScript output from cgWindow. My solution was the clunky "alternative" keyword and parameter keywords described here:

http://www.idlcoyote.com/cg_tips/kwexpressions.php

You will be happy to hear this nonsense is a thing of the past! :-)

This morning it occurred to me that I can use the same "escape sequences" used by Function Graphics to specify symbols in my Coyote Graphics routines. These escape sequences prepend a "\$\" to the symbol you want to call with cgSymbol, and append a closing "\$".

So, here is the clunky way a cgPlot command would have to be constructed currently to display properly in a cgWindow and in an output file with a mu and angstrom symbol:

```
cgPlot, cgDemoData(1), /Window, $
  XTitle='Length (' + cgSymbol('mu') + M)', $
  YTitle='Distance (' + cgSymbol('Angstrom') + ')', $
  ALT_KEYWORDS={xtitle:'Length (' + cgSymbol('mu', /PS) + M)', $
    ytitle:'Distance (' + cgSymbol('Angstrom', /PS) + ')'}
  }
```

And here is the new way to do this:

```
cgPlot, cgDemoData(1), /Window, $
```

```
XTitle='Length ( $\mu$ M)', $  
YTitle='Distance (Å)'
```

Quite a bit simpler, yes? :-)

You can find an updated program here with a new `ReplaceEscapeSequences` method:

http://www.idlcoyote.com/programs/cgcmdwindow__define.pro

I'll write an article about this change shortly, but this will work for any of the symbols available in `cgSymbol`:

<http://www.idlcoyote.com/idldoc/cg/cgsymbol.html>

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
