Subject: Re: How to display single orbits of satellite data in function graphics?
Posted by David Fanning on Thu, 02 May 2013 14:53:44 GMT

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David Fanning writes:

> P.S. Another way to speed this up would be to create your own user
> symbol (circle) and specify PSYM=8 in the call. That way you would avoid
> going into cgSymbol each time and *remaking* the circle there. That is
> probably what is taking much of the time.

This is interesting. Reducing the number of points in my circles from 72
to 36, made about 1 second of difference. Creating my own circle and
passing PSYM=8 made about another second of difference. So, finally, I
tried to get as close to the machine as possible with this code:

```
n = 793647L
lon = RANDOMU(seed,n)*360
lat = RANDOMU(seed,n)*180
cgLoadCT, 39
cgDisplay
circle = cgSymCat(3)
black = cgColor('black')
white = cgColor('white')
tic
PLOT, lon,lat, PSYM=circle, SYMSIZE=0.2, color=black, background=white
toc
END
```

This took 19 seconds, compared to my original 25 seconds in a fully
Coyote Graphics format. This seems to correspond pretty well to my rule
of thumb that using Coyote Graphics routines adds about 20% rendering
time to the normal direct graphics time. But, I'm a little bit surprised
direct graphics is this slow here. Using a "dot" instead of a "circle"
can be done in about 8.5 seconds. So, circle rendering seems to be a
slower operation.

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.")