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Subject: Re: How to display single orbits of satellite data in function graphics?  
Posted by [Lajos Foldy](#) on Thu, 02 May 2013 17:01:56 GMT  
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Hi David,

On Thursday, May 2, 2013 4:53:44 PM UTC+2, David Fanning wrote:

> 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.  
>
```

I tried this in Linux, it took 3.4 seconds through a remote X11 connection (3.2 seconds locally on a much slower machine). Maybe Windows is the limiting factor here :-)

regards,  
Lajos

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