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Subject: How to display single orbits of satellite data in function graphics?

Posted by [Paul Van Delst\[1\]](#) on Mon, 29 Apr 2013 23:26:44 GMT

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Hello,

The subject line initially read "Function graphics equivalent of PLOTS?" but I changed it to what I really want to do.

I have an older direct graphics procedure that plots individual data points (satellite data) on a map, where the colour of each distinct field-of-view (FOV) is a function of the measured quantity (say, radiance or temperature).

This is achieved by creating the global map, then looping over each observation and plotting it on the map via PLOTS setting the colour separately as needed for each plot. Takes about 0.5 seconds to display a couple of orbits of data.

Standard sort of stuff IDL is used for, right?

For grins I thought I'd alter the code to do it using function graphics. But, how does one do that? There's no equivalent of PLOTS. And besides, plotting one point at a time in function graphics (when you have more than a couple hundred points) takes forever (15minutes and counting right now, for pete's sake).

To reiterate my question: How would one plot satellite tracks of individual FOV data on a global map? E.g. a single orbit of polar orbiter data?

It used to be a trivial thing to do in direct graphics. And the IDL help is useless unless you want to register a nice regular image with a map projection.

cheers,

paulv

p.s. I'm still at IDL v8.2 and I'm getting really really tired of waiting many minutes for plots to display (that take fractions of a second in DG). I'm hoping the latest versions of IDL have sped up function graphics display by at least several orders of magnitude. Is that the case?