Subject: Huge Maps & a device for faking a large window
Posted by JD Smith on Wed, 31 Mar 2004 20:02:24 GMT
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Any makers of large map projection images here? I'm having a conceptual problem creating a very large (~1Gpix) projected image. I bin a large data set into small bins tiling the entire range of latitude and longitude (43200x21600). I do this in a series of "tiles" to avoid working with the entire data set at once. So far so good. If I then want to warp this image to a given projection (like Aitoff), it seems I must first use MAP_SET to specify the projection details, *and* have a window open of the desired output size. The problem is, I have no intention of actually displaying the projected image (too large!), so all of the memory allocated for creating that big window is wasted (which is more than a nuisance when building such huge images).

Unfortunately, MAP_PATCH (possibly via an undocumented keyword to TRIGRID -- MAP) and MAP_IMAGE (via CONVERT_COORDS) rely on a presently set window to dictate the size of the projected image. If TRIGRID(MAP=) were documented, perhaps I could do this myself, but it seems likely it also internally consults the current window to set the size for the coordinate transform. I see two ways out:

a) Does anyone know of a way to access the mapping transformations directly (aside from re-coding them yourself), independent of any particular window geometry? Why shouldn't I be able to perform an arbitrary coordinate transformation using one of the many mapping transforms MAP_SET offers? Coupling this to a specific display device size is an unnecessary limitation.

b) Barring this, is there a device in which a window can be established which does not consume any memory or accept display commands, but simply provides a dummy framework from which CONVERT_COORDS etc. can take window info?

Thanks,

JD