Subject: Re: 3D-Plot with geographical coordinates in xy-direction
Posted by Klemens Barfus on Tue, 21 Oct 2003 06:14:50 GMT
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Hello together,

thanks for your help ! I think I will convert my geographical
coordinates to rectangular coordinates and will plot them.

Klemens

Rick Towler wrote:
> "David Fanning" wrote in message...
>
>> Klemens Barfus writes:
>>
>>
>>> Once again the question from above:
>>> I try to visualize 3d-data of an atmospheric model. Coordinates in x-
>>> and y-direction are in geographical coordinates and z is in m.
>>> I thought of using SCALE3D and Map_set to generate the
>>> Coordinate-System. This doesn't work, because vertikal lines in the
>>> coordianate system are not plotted. Horizontal lines look fine, though I
>>> do not know if it is a buck from the program that it works.
>>> Does anybody of you working atmospheric data has a tip or some example
>>> code for me ?
>>
>> I don't know exactly how to do this, but I do know
>> I would NOT be using IDL direct graphics to do it.
>> That's a fool's game, it seems to me. :-)
>>
>> I think I would try to do something like the Fly-Through
>> demo, with some kind of map as the base of the elevation
>> data. Presumably RSI knows how to create map projections
>> in object graphics. Maybe you could get them to share
>> that information with the rest of us. :-)
>
>
> I agree with David that object graphics would be far more flexible but I
> can't claim it will be easier than a direct graphics approach. Then again,
> it might. I dropped direct graphics a long time ago.
>
> What sort of visualization are you going for? How many layers in z? Do you
> just want to plot a surface where x/y are in geographical coords or
> something more complicated?
>
> Regardless of the details, use the MAP_PROJ_* routines (IDL 5.6+) to convert
> your x/y data to and from cartesian coords suitible for use in object

> graphics.
>
> If you want to plot some surfaces, use this converted data to create an
> IDLgrSurface object. Assuming x,y, and z contain your data and you have
> scaled them appropriatly:
>
> oSurface = OBJ_NEW('IDLgrSurface', x, y, z, $
> COLOR=[100,100,100], STYLE=1)
> oModel = OBJ_NEW('IDLgrModel')
> oModel -> Add, oSurface
>
> XOBJVIEW, oModel, /BLOCK
>
> OBJ_DESTROY, oModel
>
>
> The above will get you started. If you have 6.0 and you want to plot a few
> surfaces and annotate then try using the iTools. If you don't have 6.0 or
> are opposed to the iTools then look at David's fscSurface program
> (www.dfanning.com). And if you are looking to do something entirely
> different, at lest the MAP_PROJ_* routines will get you started.
>
>
> -Rick
>
>
>