Subject: Re: Display radar data?
Posted by pgrigis on Wed, 08 Oct 2008 15:13:48 GMT

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David Fanning wrote:
> Dave writes:
>
>>   I have some weather radar data, whose coordinates are distances
>> (kilometers) and angles to the radar station. So how can I convert
>> these local coordinates to longitude/latitude cordinates? Please give
>> any clue.
>
> Set up a map projection of the area of interest with MAP_SET
> or MAP_PROJ_INIT. Then use CV_COORD to convert your data
> from polar coordinates to rectangular coordinates (which
> will be the data or lat/lon coordinates, in this case).

While I am sure that this strategy would work, that will be depriving
the original
poster of the joy of figuring out how to convert polar coordinates in
a plane tangent
to a sphere at a given point to spherical coordinates. Now, that's a
beautiful
geometry problem, isn't it? Furthermore, if high-precision is not
important,
the problem may be simplified a bit by making the assumption that the
earth is
locally flat at the radar position, thus reducing the problem to
converting plane
coordinates from polar to cartesian...

Ciao,
Paolo

>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")