Subject: Re: Another cartesian to spherical question
Posted by ben.bighair on Mon, 22 Dec 2008 16:23:37 GMT
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On Dec 22, 10:55 am, workma...@gmail.com wrote:
> On Dec 22, 8:29 am, workma...@gmail.com wrote:
>
>> OK, maybe simpler. If I have 3 arrays, one of lat coordinates, one of
>> lon coordinates, and one with the corresponding value at that point.
>> I want to pick some dlat,dlon and bin all the values in that region.
>
>> Next I want to project it onto a 2-d spherical grid for use with map
>> projections.
>
>> Any ideas?
>
> EDIT- the built in hist_2d will bin by lon,lat but won't take the f
> (lon,lat) and bin that by lon,lat. Are there routines where you can
> bin the value at a point by it's 2-d coordinates?

Hi,

I think you want to use JD Smith's HIST_ND (see http://www.dfanning.com/programs/hist_nd.pro) which will provide you with all you could ever need to perform slick binning tricks.

I am not sure how you would convert that 3D binned array to an image to project onto 2d map. Do you want the sum or mean of the f(lon,lat) values in each bin? In that case you could bin the lon-lat pairs and then use REVERSE_INDICES to collect all of the f(lon,lat) values in each bin.

CHeers,
Ben