Subject: Re: Another cartesian to spherical question
Posted by workmanj1 on Mon, 22 Dec 2008 16:31:34 GMT

On Dec 22, 9:23 am, "ben.bighair" <ben.bigh...@gmail.com> wrote:
> 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
(seehttp://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

Thanks,
I think I figured out how to do a 2d histogram weighted by f
(lon,lat). What I'm trying to do is bin the sum, not mean. So if I
have a lon lat cell from [[-45.5,-44.5],[-.5,.5]] with 5 elements each
equaling 1 then I'd want the value in that bin to be 5. If you want
the specifics of what I need to do it is one page back under cartesian
to spherical coordinates. This is the last data analysis routine I
need to get straight before I start simply submitting my final project
to ques and finishing my doctorate.

Thanks,
Jared