Subject: Spherical Surface Plot w/ fsc\_surface from David Fanning (: Posted by humanumbrella on Thu, 17 Jul 2008 15:41:35 GMT

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Hi,

So, I'm trying to make a spherical surface plot with the fsc\_surface class from Dr. Fanning. (: Fun!

Anyways, I have two arrays, one of latitudes and one of longitudes -then I have a data array which is lat x long 2D with datapoints. Here's what I want to do, but have yet to be successful -- and I came here to look for some tips. : )

Here is what I've tried: so, the surface plotter uses an index notation for plotting of the datapoints. However, when converting to spherical data, there will be lat\*long x and y values, instead of lat +long, ie there will no longer be only one lat for all longs, they will all be different.

I'm using R as the data value that is in the dataset at [lat,long]

So, I'm creating a 2D array that is 2, lat\*long

```
values[0, *] = sin(lat[i])*cos(long[i])*r; X's
values[1, *] = sin(lat[i])*sin(long[i])*r; Y's
```

then I have datapoints = lat\*long

so now, I have the x's and y's I need, but I need to plot them as a surface.

```
it will be,
plot
datapoints[0] at x[0]y[0]
...
datapoints[n] at x[n]y[n] where n = lat*long
```

Should I try to go about using volume for this spherical surface plot?

Thanks for any suggestions! Cheers, --Justin