Subject: Re: Irregular grid -> 2D binned
Posted by jgc on Sat, 22 Jul 2006 08:17:10 GMT
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have a look at GRIDDATA and GRID_INPUT functions, this last with DUPLICATES=Avg

J.

will wrote:
> I've sucked it up, I think I need a push in the right direction.
> Imagine that I have a long (~6 million points) list of data that
> includes three fields: latitude, longitude, abundance. The lats and
> lons are all over the place (i.e. no regular grid) and I'd like to bin
> them into an image. Additionally I'd like to average abundance of each
> bin to be the color for the image.
>
> I can use the reverse indices keword in histogram. I can even use mean
> pretty well. I can get a binned histogram using histo_2D. But I'm
> having a hard time thinking about how to go from the reverse indices of
> histogram to the histo_2D case which doesn't offer the same keyword.
> The only way I can think of to do this is to:
>
> a) do a histogram of the latitudes (using RI)
> b) do a histogram of the longitudes (using RI)
> c) find the intersection of indices for each bin that I want
> d) "flatten" the lat, lon, indices/abund cube with matrix
> multiplication
>
> It's the "c" part I'm sketched out on, my brain's can't think around
> anything but a very evil Loop.
>
> Has this really easy or been answered here before? (Array decimation
> was the closest thing I found).
>
> Thanks in advance!