
Subject: Re: Interpolating Irregular 2D Data
Posted by [Achim Hein](#) on Fri, 21 Mar 1997 08:00:00 GMT
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Bijan Pesaran wrote:

>
> Hi,
>
> I have $z=(x,y)$ data on a spiral and I want to sample it on a
> grid for further manipulations, specifically kernel smoothing.
>
> I don't see how to use interpolate or bilinear to do this. They both
> seem to require the input data to be on a grid already ...
>

I think there are two possibilities of solving this problem:

First, you can oversample your signal by zero padding in the frequency domain to get higher resolution in the time domain. If you take the oversampling factor big enough, you can sample your data down to the grid.

But I think the faster way is to interpolate the irregular data down to equidistant twodimensional axis - simultaneously, you smooth your data because of the interpolating.

Cheers

Achim

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