Subject: Re: Interpolation: grid --> observation point
Posted by John-David T. Smith on Thu, 24 Feb 2000 08:00:00 GMT
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Andy Loughe wrote:
>
> Hello,
>
> I have inherited code that takes atmospheric model (gridded) data
> and interpolates it to station observation points that report
> hourly precipiation. The model points form a cartesian coordinate
> system, while the station observations are spread randomly
> within the boundaries of the full model domain.
>
> Currently, a bi-linear approach is used to interpolate the
> model data to each observation point. This method uses the
> four closest model grid points which surround the observation
> point.
>
> I would like to use more than just the four model grid points
> which surround the observation point, and weight the more distant
> points appropriately.
>
> Any suggestions on effective methods for doing this in IDL?
>
> Thanks!
>
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> Andrew F. Loughe email:loughe@fsl.noaa.gov phone:(303)497-6211

See the CUBIC keyword to either poly_2d or interpolate. Full n-point order polynomial interpolation is not available, but might not be what you want either. You might also look at krig2d.

JD

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