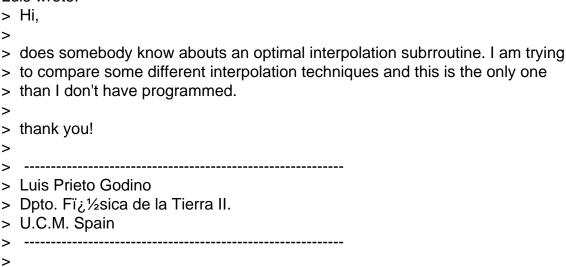
Subject: Re: Optimal interpolation Posted by Robert Stockwell on Thu, 22 Aug 2002 15:49:18 GMT View Forum Message <> Reply to Message



>



I've got some Loess fitting routines for 3D interpolation of a two component vector field. It uses SVD to solve the 3D second order polynomial fitting. These fitting parameters are then used to interpolate the data. The Loess part is a local fitting routine that weights the data based on its distance from the required point. That weighting could easily be modified to be based on some error measurement and therefore become an optimal interpolation routine. It also returns an estimate of the error of the value of the interpolated point.

Does this sound like it would be useful?

It would take me a bit of work to bang it into a generalized form. Also, my code for selecting the "near points" is a bit outdated as it is based on 2 one dimensional histogram with return_index. That part should be rewritten.

Cheers, bob