Subject: Re: linear interpolation to form a deformation field
Posted by g.nacarts on Thu, 24 Apr 2014 09:14:13 GMT
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How shall I change the string array to a numeric?

I have an image and I want to use cspline, or spline (any kind of interpolation) to form a deformation field.

I get my data from the image: STRING = Array[384, 384]

I create the following:

Dx= [[1,2,1,1],[2,1,3,1],[5,8,1,2],[3,8,2,1]] - deformation field (x-coordinates)

Dy= [[1,2,3,1],[2,5,4,1],[6,8,1,3],[5,7,2,9]] - deformation field (y-coordinates)

I want to use interpolation to find the displacement in x and y direction respectively. I assume I will end up with two matrices one says the displacement in x direction and the other in the y direction.

I had a look on syntax of cspline() and spline() functions: Result = SPLINE(X, Y, T [, Sigma] [, /DOUBLE]). It says that X and T must be monotonically increasing. I made the assumption that X is mine Dx (it might be wrong) and in my case Dx is not monotonically increasing so I don't know how to use these functions based on my data.