Subject: interpolation question Posted by chen123.dian on Thu, 20 Apr 2006 04:25:15 GMT View Forum Message <> Reply to Message

Hi, I want to use nearest-neighbor method to interpolate 2-D data. After reading some posters here and idl references, I am still confused how to do. I use a 1-D data to explain my problem. For example, there is x-arrary, [1.0, 2.9, 5.1], the corresponding y-arrary is [10, 50, 80]. Now we want to get the y-values at x-value [0.5, 2.6, 3.1, 4.6] using nearest-neighbor method. The result of y-values should be [10, 50, 50, 80]. Can the IDL function of interpolate.pro do this work? The input of interpolate.pro, X,Y,Z, arrays of numeric type containing the locations for which interpolated are desired, is very confuse. Is there any function like the function interp1 (interp2 for 2-D data) for matlab? Like, y_values=interp1(x, y, x-values, 'nearest', 'extrap').

Thanks in advance.

Chen