Subject: Re: Calculate convex hull of scattered data? Posted by PREUSSER on Tue, 14 Mar 1995 13:52:08 GMT

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In article <3k1ocd\$7dk@aplinfo.jhuapl.edu>, art.croucher@jhuapl.edu wrote:

> I'm trying to calculate the convex hull which encloses a scattered data

> set. The JHU/APL CONVEXHULL routine didn't work, presumably because

- > the data set isn't a polygon. Does anyone have a routine that will
- > calculate either a convex hull or a polygon suitable for input to >

> CONVEXHULL?

One method of scattered data interpolation in IDL/PVWAVE is that of Akima with quintic polynomials, which I have improved.

In Akima's original work ACM Algorithm 526, there are output parameters giving the indices of the input points forming the convex hull of the point set.

You get Alg 526 from netlib.att.com, directory netlib/toms. Of course, it is in FORTRAN...

In IMSL/IDL there was a routine TRIANGULATE, which also returned that list. In PV-WAVE Advantage it seems that routine has disappeared.

A.PREUSSER

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Note my new Phone Number: -49-30-8413-3220