Subject: Re: Point/Polygon Routine
Posted by tildes on Tue, 09 Jan 1996 08:00:00 GMT
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In article 760@ncar.ucar.edu, cavanaug@uars1.acd.ucar.edu (Charles Cavanaugh) writes:
>
> Does anyone have a routine that determines if a given 2-D point is inside a
> given 2-D polygon?
>
> Thanks in advance.
>
>
> Charles Cavanaugh
> --
> Charles Cavanaugh | "Words are very unnecessary, they can only do harm"
> cavanaug@ncar.ucar.edu | - Depeche Mode
> NCAR Boulder, CO, USA | "Facts all come with points of view"
> My opinions | - Talking Heads

I dont have any IDL code for doing this but I can outline a method that is
pretty straightforward.

Consider a line from the point in question to plus (or minus) infinity.
Count the intersections between this line and each of the edges of the polygon.
If the total count is zero or even then the point is outside the polygon.
If the total count is odd then the point is inside the polygon.

The only traps to watch out for are:
- where the point is on one of the edges or vertices.
- if the line to infinity goes through one of the vertices (you should only
count one end of each edge as being a part of that edge).

Good luck.

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