Subject: Re: problem computing area Posted by aetherlux on Tue, 06 Oct 2009 00:56:04 GMT View Forum Message <> Reply to Message

On Oct 5, 9:02 am, jameskuyper <jameskuy...@verizon.net> wrote: > aetherlux wrote: >> Hi everybody. >> I am trying to compute the area of this figure with >> IDLanROI:ComputeGeometry >> http://juan.gulo.org/area2.png > >> but I obtain a negative area. I have checked it and there is not lines >> crossing over others. For the "horizontal" part of the figure the line >> begins and finishes in negative values of "y" (that is, the first and >> last point), but is it a problem? >> Ideas? I have been looking at it all the weekend but I don't have any >> clue about the possible problem. > > A closed planar curve can represent either the area inside the curve, > or the area outside the curve; the distinction is typically > represented by listing the points either in the clockwise or counter-> clockwise order around the curve. I'm not sure which convention is > used by IDLanROI. The formula usually used for calculating the area > gives you a positive value when the points are in the correct order, > and a negative value of the same magnitude when the points are in the > wrong order. If the number you are getting seems to have the correct > size, but the wrong sign, you may simply have listed the points on the > curve in the wrong order.

>

- > If the size of the number is wrong, then you have some other problem.
- > For instance, the points on the upper parabolic curve must be listed
- > in the opposite order of x values, than the points on the bottom
- > curve; if the upper one is in the wrong order, you'll get a negative
- number, but one that is not simply the negative of the correct number.

>

- > In order to figure out what really is going wrong here, we need to see
- > how your code for creating the IDLanROI object which is what David
- > was elliptically referring to.

After applying "reverse" of the x and y vectors I have obtained a correct positive area. It is weird. I have tested this routine with a bunch of different contours working in the same way and the area is positive without need of being counter-clockwise.

So, although I have not a clear idea about what was going wrong, now

it is solved.

Thank you very much.