
Subject: Re: Curve Fitting Question

Posted by [David Fanning](#) on Tue, 20 Nov 2012 14:58:51 GMT

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David Fanning writes:

> Hold off on this a minute. I've been using my version
> of the OTSU_THRESHOLD program for a week now, and I've
> been seeing some strange results. The only thing I did
> in my program was to beef up the keywords and error handling
> for the histogram itself. I didn't change the underlying
> code for OTSU_THRESHOLD.
>
> In fact, just to confirm this, I've now gone back and
> used the VERY same variable names, etc. But, I seem
> to be getting different slightly different results with
> the two programs.
>
> I am trying to track this down now. In fact, I'm using the
> newsgroup in EXACTLY the way Helder describes this morning!
>
> Here is what just occurred to me. One of the things I am
> VERY particular about (long experience, probably) is matching
> the data type of the BINSIZE keyword with the data type of
> the data going into the histogram. The OTSU_THRESHOLD program
> I was using as a model didn't do this. I wonder if this is
> the source of the difference. Back soon! :-)

Humm. There is always something strange going on with Histogram!

The difference in our two programs is that I set the MIN and MAX keywords on the Histogram call to the minimum and maximum of the data. OTSU_THRESHOLD doesn't do this. As a result the output min and max for their histogram of byte data is 0 to 255. Mine is 1 to 50. If I use the MIN and MAX keywords to set the histogram range to 0 to 255, my results are identical.

I'm going to have to think about this. I think OTSU_THRESHOLD has been written *assuming* byte data is coming in. I can't always be so trusting of the data I work with. So...hummm. Any ideas?

I would have thought the OTSU threshold method would work for ANY bimodal population of values, assuming you could calculate a histogram.

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")
