Subject: Re: Curve Fitting Question Posted by David Fanning on Tue, 20 Nov 2012 14:58:51 GMT View Forum Message <> Reply to Message

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...humm. 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.")