Subject: Re: 3D histogram + sensible thresholding Posted by David Fanning on Tue, 17 Aug 2004 04:44:00 GMT

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Dee (nee Dorthe) writes:

- >> I don't know of anything built into IDL, but it
- >> would be easy to build yourself. You could easily,
- >> for example, figure out how to do a 1 standard deviation
- >> stretch, or something of the sort.

> Could that fairly easily be built into XSTRETCH?

I think it *was* built into XSTRETCH, but I took it out because of all the people complaining about me mucking with their data without warning them. :-)

(Actually, I think I probably do some sort of 2% linear stretch, an idea I stole from ENVI many years ago. But yes, this is easily set as the default stretch, if you wanted it to be.)

- >> There is nothing in the histogram part of XSTRETCH that
- >> precludes using a 3D array. The only thing 2D about XSTRETCH
- >> is that it assumes a 2D image array to display.

>

- > So if I modify the code to display one slice of the 3D array it should
- > work? The histogram would represent the 3D data?

Yes, certainly.

- > We've communicated about my data before you might remember the x-ray
- > tomography data of air and water flow in soils I showed you when you
- > were in Copenhagen. I didn't use my full name (Dorthe Wildenschild)
- > when I signed up for the news group.

Sneaky, sneaky. But we *always* learn everything we need to know about a person. :-)

- > I've got data sets that are spread differently across the "color"
- > (grey scale) spectrum, so I'm trying to find a threshold for one phase
- > (the air) that will work for several volumes representing different
- > saturations. Xstretch is such a nice tool for playing around with the
- > cutoff, but I would like to take a more scientific approach than
- > setting it to the value I think "looks" best.

Well, then you have to find some theoretical or physical value that you can defend against the naysayers. But that's science, not computer graphics. I make it a point to always deal with the latter, if possible. :-)

Cheers,

David

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