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Subject: Re: user-selected ROIs

Posted by [David Fanning](#) on Wed, 04 Aug 2010 18:46:07 GMT

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Emily writes:

- > The XROI procedure is the first thing I tried, but I don't understand
- > how to get the actual values I've already calculated in the histogram.

I don't understand what you mean by "actual values" in the histogram. A histogram tells you how many values fall into a particular bin of the histogram. And you can use the reverse indices to tell you which of the data values contributed to that count, but there are no "values" per se. You could, of course, use the indices retrieved with REVERSE\_INDICES to go back to the data and obtain the data values. Is this what you mean?

- > This is why I started doing it in a different way. If I just send the
- > image, I get the occurrences over 0-255 and if I send the actual data,
- > which is an array, I just get a little image that I can't really even
- > see.

I think you are confusing the \*display\* of your image with the image itself. They are really two completely different things. The "values" of the image are completely divorced from the "values" in which the image is displayed, except that a very small subset of display values (0 to 255) are used to represent an infinite number of real (image) values. You are very rarely interested in the display values. In fact, you may not even know what they are!

- > If I send the array of masses, the latitude array, and longitude
- > array, I just get three tiny images.

Three tiny images where?

- > Do you know how I send XROI the
- > real values of the pixels (n-g/m3, not 0-255) and still have it
- > displayed as a map?

What does "displayed as a map" mean in this context? Does it mean you have map grid lines and continental boundaries on it? XROI doesn't care what you pass it, as long as it is an 8-bit or 24-bit image. What you are going to get back from XROI is not the information you are looking for. Rather, it is the information you need to \*retrieve\* the values you are looking for from the original image data. In other words, what you are looking for is a mask

that you can use to either select the image values you are interested in, or to select the image values you are not interested in. Your goal here is to obtain a mask that you can apply to your real image data that allows you to work with the right pixels.

I think if you read the first article a couple of times, and maybe work through the example, you will see what I mean.

Cheers,

David

P.S. Do you see how the REVERSE\_INDICES from the Histogram are a type of mask to select pixels you are interested in?

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

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

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