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Subject: Re: Histogram Hot-shots Required  
Posted by [Liam Gumley](#) on Fri, 16 Jul 1999 07:00:00 GMT  
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David Fanning wrote:

- > What I can't figure out tonight is how to find out
- > what bin that pixel is in, given that I know the pixel
- > value. (Even as I write this sentence I have the sense
- > that this is a trivial exercise, but I'm afraid it is
- > not yielding the shear number of hours I have spent
- > on it. At least not for me.)

Assuming I know the minimum and maximum values (the range) used in creating the histogram, the histogram binsize, and the number of bins, the zero-based bin index is given by

```
bin_index = long(float(pixel_value - histogram_min_value) /  
float(binsize))
```

and then to protect against pixel values LT histogram minimum value, or  
GE histogram maximum value

```
bin_index = (bin_index > 0L) < (number_of_bins - 1L)
```

At least, that's how it looks to me on paper....

Cheers,  
Liam.

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