Subject: Re: There is NO TRUTH! Re: Histogram Hot-shots Required
Posted by Liam Gumley on Tue, 20 Jul 1999 07:00:00 GMT
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David Fanning wrote:
> Forget it, problem solved. The bottom line: draw
> your own *&%@# histogram plots with the PLOTS command.
>
> Best method is:
>
> ; Liam's method 1:
>
> binNum1 = FLOOR((value - Min(array)) / binsize)
>
> But you have to draw your *OWN* histogram plots, or
> your graphical representation will *never* look like
> what it is suppose to look like:
>
> Plot, bins, histdata, /NoData, XRange=range, XStyle=1
> FOR j=0,N_Elements(bins)-2 DO BEGIN
> PlotS, [bins[j], bins[j], bins[j+1], bins[j+1]], $
> [0, histdata[j], histdata[j], 0], Color=yellow
> ENDFOR
> PLOTS, [value, value], !Y.CRange

Sounds like we need a nice histogram plotting procedure: any takers?

I'd keep the protection against integer binsize values by converting to
a float, e.g.

bin_index = (pixel_value - histogram_min_value) / FLOAT(binsize)
bin_index = FLOOR(bin_index)

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)

I'm very fond of testing algorithms on paper before I implement them in
code. I tested the method shown above with a few examples on a notepad,
so I was 99% sure it would work. My advice to those starting out in IDL
is this: even though IDL offers a wonderful range of time-saving
shortcuts (e.g. HISTOGRAM), it often pays to do a reality-check on paper
before coding up an algorithm.

Cheers,
Liam.

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