Subject: Re: Histogram saga
Posted by David Fanning on Mon, 22 May 2006 13:26:50 GMT
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Daelomin writes:

> I just looked at all the archives with histogram related problems..
>
> I am quite surprised to see that it's not fixed in 6.2. I recently had
> a problem with my data: I plot 86140 points of data that range from
> [8,75] but somehow IDL creates bogus values between 0 & 8 !!
>
> If I include another point in the array (say array2=fltarr(86141) &
> array2[0:86139]=array1[*]) which value is 0, I then get the proper
> histogram I would have expected. Namely it has a flat line between 0 &
> 8 and picks up at the minimum...
>
> I just find this really really weird...

Well, we'll add it to the list... :-)

Pretty much everyone, by now, has learned how to fudge the HISTOGRAM
output to get something that looks more like a histogram plot.
Here is how I do it:

```
;  ********************************************************** *******
   ; Calculate the histogram.

histdata = Histogram(image, Binsize=binsize, Max=Max(image), $
    Min=Min(image))

   ; Have to fudge the bins and histdata variables to get the
   ; histogram plot to make sense.

npts = N_Elements(histdata)
halfbinsize = binsize / 2.0
bins = Findgen(N_Elements(histdata)) * binsize + Min(image)
binsToPlot = [bins[0], bins + halfbinsize, bins[npts-1] + binsize]
histdataToPlot = [histdata[0], histdata, histdata[npts-1]]
xrange = [Min(binsToPlot), Max(binsToPlot)]

Plot, binsToPlot, histdataToPlot, PSym=10, Color=dataColor

   ; Make histogram boxes by drawing lines in data color.

FOR j=1L,N_Elements(bins)-2 DO BEGIN
   PlotS, [bins[j], bins[j]], [!Y.CRange[0], histdata[j] < max_value], $
         Color=dataColor
```

ENDFOR
; ** *******

Cheers,

David
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