Subject: Re: histogram function question
Posted by Burch on Fri, 06 Mar 2015 16:08:09 GMT
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On Friday, March 6, 2015 at 8:03:05 AM UTC-6, Dae-Kyu Shin wrote:
> hi
>
> here is a example code
>
>
>   data = [0, 0.3, 1.3d]
>   h1 = HISTOGRAM(data, nbin=3, min=0, max=1, loc=loc1)
>   h2 = HISTOGRAM(data, binsize=0.5d, min=0, max=1, loc=loc2)
>
> print, h1
> print, h2
>
> h1 = 2   0   1
> h2 = 2   0   0
>
>
> h1 and h2 is not equal!!
> is it correct??
>
>
> thanks

There is a note in the documentation for the MAX keyword:

"Note: If NBINS is specified, the value for MAX will be adjusted to NBINS*BINSIZE + MIN. This ensures that the last bin has the same width as the other bins."

So it seems for h1 BINSIZE is calculated to be

 (max - min)/(nbins-1) = 0.5

and then max is adjusted to

nbins*binsize + min = 1.5,

whereas in h2 there is no *internal* adjustment to MAX.

-Jeff