Subject: Re: HISTOGRAM, binsize, and max
Posted by David Fanning on Wed, 18 May 2011 14:23:25 GMT
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andry writes:

> Can somebody explain why the following gives different number of
> elements with the HISTOGRAM function?
>
> IDL> hist_spd= HISTOGRAM(velocity[indb],binsize= .20,min=0.,max=1.40)
> IDL> print,hist_spd
>   6   16   23   0   0
> 0   0
> IDL> hist_spd= HISTOGRAM(velocity[indb],binsize= 20.,min=0.,max=140.)
> IDL> print,hist_spd
>   45   0   0   0   0
> 0   0   0
>
> (whatever velocity content is)
> My main concern is the number of elements returned by the function.
> The only difference between the 2 command is that I multiplied the
> binsize and max with 100. BUT they return 7 and 8 elements?
>
> I would expect they both return the same number of elements.

People expect a lot of things from computers, but the
computers don't always oblige. I think this is just the normal
weirdness with how computers represent numbers. It
turns out this is different from how humans apparently
do it. :-)

  http://www.idlcoyote.com/math_tips/sky_is_falling.html
  http://www.idlcoyote.com/math_tips/razoredge.html

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")