Subject: Re: HISTOGRAM and the Razor's Edge.
Posted by James Kuyper on Thu, 12 Jun 2003 13:53:58 GMT

Tim Robishaw wrote:

...
> So, just when I thought it was safe to start using HISTOGRAM with the
> frequency that Californians use LIKE, I was brought this scary result
> by the guy on the other side of my wall (his name is Tiberius):
>
> IDL> print, histogram([-5.50,-5.45,-5.40,-5.35,-5.30,-5.25],min=-5.50,bi nsize=0.05)
>   1   2   0   2   0   1
>
> Wait a minute, this should be a uniform distribution!
>
> Now, I admit that Tiberius contrived this example with the intent to
> cause harm to HISTOGRAM by placing the values at the exact boundaries
> of each bin. But, we didn't EXPECT it to break! Honest. After

If you expect to get a lot of values that are within round-off error of
being exactly on the boundary values, then your boundary values have
been poorly placed. You should use min=-5.525 for this case.