
Subject: Re: histogram, how to trasfer from linear bins to logarithmic bin?

Posted by [Jeremy Bailin](#) on Thu, 01 Oct 2009 18:59:51 GMT

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On Sep 29, 5:33 pm, JDS <jdtsmith.nos...@yahoo.com> wrote:

> On Sep 28, 6:54 pm, David Fanning <n...@dfanning.com> wrote:

>

>> Gavin Ge writes:

>>> HI, I have a question that now I get a set of datas, which are

>>> linearly binned into the histogram, but how to transfer it into a

>>> logarithmic bins?

>

>> Here is one way to create a histogram with logarithmic

>> bins:

>

>> http://www.dfanning.com/code_tips/logbins.html

>

> This would better be described as a way to create a histogram using

> any arbitrary bins of your own devising; pretty cool indeed, since you

> can design those bins in whatever way is useful. It does require you

> to sort your array beforehand, and so in this case would be less

> efficient than just taking the histogram of the log of your data.

>

> JD

As I mentioned in my `value_locate` essay, `value_locate` combined with histogram can be very powerful! I'm sure you've already thought of these, but two really good uses are:

(1) using `reverse_indices` to find out which elements fall into the arbitrary bins (and all associated tricks based on `reverse_indices`)

(2) using histogram on very sparse data (which is how I solved the histogramming-the-surface-of-the-sphere issue we were discussion)

-Jeremy.
