
Subject: Re: hist_2d question

Posted by [Chris\[6\]](#) on Tue, 16 Dec 2008 17:49:08 GMT

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On Dec 16, 3:45 am, "Jeff N." <jeffnettles4...@gmail.com> wrote:

> Hi folks,
>
> I'm working with 2d histograms for the first time, and have a question
> the documentation doesn't seem to answer (or i missed it).
>
> Is there a way to construct your bins such that you'll know how many
> output DN your image has? I want to put a color table on my image,
> and have been constructing color tables to match the number of output
> DN, which is fine but i'm wondering if there's a way to ensure 256 DN
> in the output. I'm sure the answer to this question is "make your
> bins right", but i'm wondering if there's a straightforward way to
> calculate how to do that.
>
> Thanks for any help,
> Jeff

I don't know of any easy way to do this, but I assume you want the
__peak__ number of counts in a bin to be 256 (the total number is just
the number of datapoints you feed into the histogram call, unless you
clip out the edges). Why not just use `bytescl()` to scale the result
afterwards?

Subject: Re: hist_2d question

Posted by [jeffnettles4870](#) on Tue, 16 Dec 2008 19:19:07 GMT

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On Dec 16, 12:49 pm, Chris <beaum...@ifa.hawaii.edu> wrote:

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> afterwards?

Hi Chris,

Thanks for getting back to me...one of my little issues was that i was using some code sent to me by someone else. I finally looked at their code and realized what i should've known from the start: they were applying a color table using a (1d) histogram of the 2d histogram, so all i need to do is make that histogram give me 256 bins, make a color table with a color for each bin in the histogram, and i should be all set (in theory of course!).

Thanks,
Jeff

Subject: Re: hist_2d question
Posted by [Jeremy Bailin](#) on Wed, 17 Dec 2008 00:20:59 GMT
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On Dec 16, 2:19 pm, "Jeff N." <jeffnettles4...@gmail.com> wrote:
> On Dec 16, 12:49 pm, Chris <beaum...@ifa.hawaii.edu> wrote:
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> Jeff
```

On a marginally related note, I recently wrote code for doing histogram equalization of images made from 2d histograms (ie. hist_2d or hist_nd... in fact, the code should work for multi-dimensional histograms made with hist_nd, but I've never tested it), in case anyone would find it useful:

<http://web.astroconst.org/jbiu/jbiu-doc/plot/histeq.html>

The result should have approximately equal numbers of pixels in each intervals of value.

(not yet in an official JBIU release, but you can grab the code from the Source link)

-Jeremy.
