
Subject: There is NO TRUTH! Re: Histogram Hot-shots Required
Posted by [davidf](#) on Mon, 19 Jul 1999 07:00:00 GMT

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Folks,

More evidence that the apocalypse is upon us....

Here are five different methods for calculating the histogram bin number from a value:

; Liam's method 1:

```
binNum1 = FLOOR((value - Min(array)) / binsize)
```

; Liam's method 2:

```
binNum2 = ROUND((value - Min(array)) / binsize)
```

; Liam's method 3:

```
binNum3 = CEIL((value - Min(array)) / binsize)
```

; Eddie's method:

```
binNum4 =(where(R ge ((where(((where(array eq value))[0]) eq $  
R[R[0]:*]))[0]+R[0])))[0]
```

; My brute-force, no-excuses method:

```
FOR j=0,N_Elements(bins)-2 DO BEGIN  
  IF value GT bins[j] and value LT bins[j+1] THEN BEGIN  
    binNum5 = j  
    goto, getout  
  ENDIF  
ENDFOR  
getout:
```

Here is typical output of this print statement:

```
Print, binNum1, binNum2, binNum3, binNum4, binNum5
```

34	35	35	35	34
11	12	12	12	11
11	11	12	12	11
13	13	14	14	13
2	3	3	3	2
10	11	11	11	10

12	12	13	13	12
28	28	29	29	28
26	27	27	27	26
33	34	34	34	33
34	35	35	35	34
32	33	33	33	32

Notice that method 1 and method 5 always produce the same number. Whew! It may be brute-force, but I can explain it and I am SURE it is right!

But, woe of woes, here is the graphical output for the last value:

<http://www.dfanning.com/images/histogram.jpg>

Not even close. :-(

The best graphical values are STILL method 3.

HELP!!!!

Cheers,

David

P.S. Let's just say my confidence in rational thought is slipping...

Of course, I'm listening to my Bob Marley CD, so that may have something to do with it :-)

--

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