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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