Subject: Re: Histogram quickie
Posted by JD Smith on Fri, 08 Dec 2006 22:38:07 GMT
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On Fri, 08 Dec 2006 12:55:56 -0600, Christopher Thom wrote:

> Hi all,
>
> I'm a long time where() fan, but trying to learn to wield this histogram
> beast. I'm working on an algorithm, and would like a way to divide an
> array of values into two bins, such that the sum of each bin is roughly
> equal. The values have no fixed distribution, so I expect the bin sizes to
> be non-uniform.
>
> This sort of problem seems an ideal place to start earning my histogram
> badge, but I have to confess to only being able to think of
> brute-force-type solutions. Any suggestions?

Probably WHERE will serve you well:

```
IDL> t=total(a,/CUMULATIVE)
IDL> bin1=where(t lt t[n_elements(a)-1]/2,COMPLEMENT=bin2)
```

Of course, there are many ways to divide values such that they fall into two roughly equal bins (n choose 2), some of which may be better than others.

JD