Subject: Re: Histogram quickie
Posted by Christopher Thom on Mon, 11 Dec 2006 15:49:40 GMT
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Quoth JD Smith:

> 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.

aha! I wasn't aware of the /cumulative flag to total(), despite some searching. Thanks for the pointer.

cheers
chris