
Subject: Re: More fun

Posted by [thompson](#) on Mon, 20 Nov 2000 08:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

"J.D. Smith" <jdsmith@astro.cornell.edu> writes:

> Here's one I just came up against. Suppose you want to rebin a vector
> to some smaller size, an integer factor smaller. E.g. 100 elements to
> 20 elements. Now, rather than the average of those elements in each
> interval, etc., you want merely the average of the first and last member
> of that interval. E.g., you want:

> [(v[0]+v[4])/2, (v[5]+v[9])/2, (v[10]+v[14])/2, ...]

> Rebin by itself can't work, I don't think.

> Takers?

> JD

> P.S. No for loops please. Bonus points if you don't build an explicit
> index list.

If the number of elements in the array is evenly divisible by the rebin factor
(such as 100 is evenly divisible by 5), then the following should work

```
TEMP = REFORM(ARRAY, M, N_ELEMENTS(ARRAY)/M)
RESULT = REFORM(TEMP(0,*) + TEMP(M-1,*) ) / 2.
```

William Thompson
