
Subject: Re: Unexpected rebin behavior

Posted by [James Kuyper](#) on Wed, 03 Sep 2003 16:31:30 GMT

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Mike Chinander wrote:

>
> Performing rebin on 2-d (or any higher dimension) integer arrays sometimes
> give results I didn't expect. Here's a trivial example array:

>
> IDL> help, b
> B INT = Array[2, 2]

>
> IDL> print, b
> 8 9
> 10 13

>
> Minifying this to a 1x1 array with rebin gives:

>
> IDL> print, rebin(b,1,1)
> 9

>
> But,
>
> IDL> print, fix(total(b)/4)
> 10

What it's doing is $\text{total}(b/4)$, rather than $\text{total}(b)/4$. This has the advantage of handling large numbers without producing overflow. It has the disadvantage of underflowing for very small numbers, and producing wierd results when re-binning integer data.
