Subject: Re: Unexpected rebin behavior
Posted by mchinand on Wed, 03 Sep 2003 17:02:31 GMT
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In article <3F561762.B0B31F0B@saicmodis.com>,
James Kuyper <kuyper@saicmodis.com> wrote:
> 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 total(b/4), rather than 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.

Then why does rebin of the transpose give a different result?

IDL> print, rebin(transpose(b),1,1)
      10

If it were just doing total(b/4), b and tranpose(b) should give the same
results.

--Mike Chinander

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